

Catalogue of the  
Type and Figured Specimens  
of Macrofossil Algae in the  
British Museum (Natural History)

by M. Crawley



### Other Catalogues in this series:

- 1 Catalogue of the Type and Figured specimens of Mesozoic Ammonoidea in the British Museum (Natural History). D. Phillips. 1977, 220pp. £15.00
- 2 Catalogue of Type and Figured Fossil Crustacea (ex. Ostracoda), Chelicerata, Myriapoda and Pycnogonida in the British Museum (Natural History). S.F. Morris. 1980, 56pp, 3 plates. £7.50
- 3 Catalogue of the Type and Figured specimens of Fossil Cephalopoda (excluding Mesozoic Ammonoidea) in the British Museum (Natural History). D. Phillips. 1982, 98pp. £13.50
- 4 Catalogue of Type and Figured specimens of Trilobites in the British Museum (Natural History). S.F. Morris & R.A. Fortey. 1985, 183pp, 8 plates. £25.00
- 5 Catalogue of the Type and Figured specimens of Fossil Echinoidea in the British Museum (Natural History). D.N. Lewis. 1986, 96pp, 5 plates, 16 figs. £13.50
- 6 Additions to the Catalogues of Type and Figured Fossil Cephalopoda in the British Museum (Natural History). D. Phillips. 1987, 155pp. £00.00

*Available from:*

Publication Sales,  
British Museum (Natural History),  
Cromwell Road, London SW7 5BD, England.  
Tel: 01-938 9393

Catalogue of the  
Type and Figured Specimens  
of Macrofossil Algae in the  
British Museum (Natural History)

by M. Crawley

# Contents

Introduction	iii
Type and Figured Fossil Algae	1
References	45
Index of specific names	50

Printed by the British Museum Publications  
417188

The Museum also produces five series of the *Bulletin of the British Museum (Natural History)*. One or more volumes of the *Geology Series* are published in a calendar year, each containing about 300 pages, and Parts of each volume are complete in themselves and available separately. Subscriptions may be placed with Publications Sales at the Museum for one or more series on either an Annual or a Per Volume basis.

Catalogues are edited in the Museum's Department of Palaeontology

Keeper of Palaeontology: Dr L. R. M. Cocks

Scientific Editor: Dr M. K. Howarth

Cover illustration: an oblique section of V. 57669(1),  
*Imperiella iranica* Elliott, a dasyclad from  
the Upper Permian of Elburz, Iran.  $\times 17$

© British Museum (Natural History) 1988

ISBN 0 565 01042 5

Printed in Great Britain by Antony Rowe Limited,  
Chippenham, Wiltshire



# Introduction

Algae are diverse and environmentally important plants, ranging from microscopic unicells through filamentous forms to the relatively large and highly differentiated plant bodies of charophytes and of many Green, Red, and Brown "seaweeds". The selection of algal groups encompassed by this catalogue comprises "macrofossil" algae in a broad sense, which includes some microscopic forms such as *Botryococcus*, but excludes the majority of unicellular forms, such as dinoflagellate cysts, coccolithophorids, and prasinophyte cysts. Both the microfossil and macrofossil algae are of considerable palaeobiological interest, and together with bacteria they include the earliest forms of life - the prokaryotic Blue-Greens ('Cyanobacteria'), which occur in Archaean stromatolitic limestones as early as 3,700 million years ago and played a major rock-forming role. We know that these forms dominated life on Earth for some 2,800 million years before the first convincingly eukaryotic algae evolved - probably as a result of endosymbiosis - in the late Proterozoic, approximately 900 million years ago. This led to an initial expansion of algal diversity in the Cambrian and Ordovician 500 million years ago. By the Silurian, algae were extremely diverse and are represented by many calcareous macrofossil species of beautiful form. This increasing diversification of macro-algae had been heralded in the late Proterozoic by the beginnings of a considerable diversification of unicellular, largely planktic forms, which are now recognised to be of immense biostratigraphical and palaeoenvironmental importance, especially in the later Mesozoic and the Cenozoic. They provide valuable information for oil and mineral exploration, and in many instances were probably the organic material from which oil itself was derived. It is less widely appreciated that calcareous macro-algae were also formerly very diverse; owing to their calcification during life they are often abundantly preserved in Palaeozoic and Mesozoic rocks, and these too are of considerable industrial importance, both stratigraphically and for determining palaeoenvironments. Such calcareous algae comprise a major part of the British Museum macrofossil algal collection, which is rich in primary type material, and includes important specimens presented by such specialists as J. H. Johnson, J. Pia, L. and J. Morellet, and G. F. Elliott. Other important collections are those presented by E. J. Garwood, J. Groves, C. R. Reid, M. M. Ogilvie-Gordon, P. C. Sylvester-Bradley, T. M. Harris and A. Wood.

When he joined the staff in 1969, Dr. G. F. Elliott re-organised the algae as a separate sub-section of the palaeobotany collections. For practical reasons the hand specimens and rock-samples were left with the other plant collections (though recorded in a separate algal index), whilst the thin sections and other slide preparations were housed, as well as indexed, separately. This arrangement has been maintained since Elliott's retirement in 1981. Although somewhat uneven in content this collection has attracted many visitors both from home and abroad. Reflecting Dr. Elliott's profound experience of Middle Eastern geology with the Iraq Petroleum Company, the collection is especially rich in material from that region, particularly Dasycladaceae and Udoteaceae. Other well represented material includes the British Upper Jurassic Charophyta described initially by C. R. Reid and J. Groves, and subsequently by T. M. Harris; Cretaceous algae from Sarawak described by J. H. Johnson; Middle Triassic algae from Italy described by M. M. Ogilvie-Gordon; three beautifully preserved holotypes in a tiny fragment of Lower Devonian Rhynie Chert from Scotland described by W. N. Croft and E. A. George; and Miocene coralline algae from Malta described by D. W. J. Bosence.

The present catalogue is based on Dr. Elliott's indexes, which have been checked for accuracy and brought up-to-date. It is hoped that the catalogue will further enhance the usefulness of this small but important part of the National Collections of plant fossils. The explanatory notes which follow are intended to make clear the scope of the material covered (which includes certain Problematica).

## Explanatory notes

The catalogue includes primary types (holotypes, neotypes, lectotypes and syntypes), figured paratypes and other figured specimens. The 538 entries cover 971 specimens. Of these, 236 (27%) are primary types.

The catalogue is arranged by genus in alphabetical order. Whilst the most up-to-date names are used when known, the nomenclature is not definitive. Cross references to earlier published determinations are included.

Geographical data are given as originally published with any subsequent changes in square brackets e.g. Breconshire [Powys]. Lithostratigraphical and biostratigraphical data have been updated where necessary.

Except for primary types and paratypes, all specimens sharing common information are included under a single entry.

The catalogue includes specimens that are currently thought to be probably algal (e.g. *Pachythea*, *Palaeachlya*, *Parka*, *Prototaxites*) or possibly algal (e.g. *Hensonella*, *Tubulites*, *Uraloporella*). However, specimens no longer considered to be algae are excluded (e.g. *Aeliosacchus*, *Neosolenopora*).

All the registered specimens in the algal collections are allocated a unique registration number, normally with a capital letter as a prefix. The prefix refers to a fossil group, usually "V." indicating plants. Very occasionally a different letter has been used, in which case the relevant group is named in the remarks section at the end of the entry. In some cases the registration number is cross-referenced to an earlier prefixed or non-prefixed registration number (non-prefixed numbers were used until 1880). Other points are:

- (i) An Arabic number suffix enclosed in round brackets is given to different individuals on a block or slide. For example, figured specimens of *Terquemella bellovacina* and *T. globularis* occur in the same thin section, V.41589. In this catalogue *T. bellovacina* has the number V.41589(1), whilst *T. globularis* is catalogued as V.41589(2). Note that these Arabic numeral suffixes were not used in the original but have now been added to create unique registration numbers.
- (ii) Multiple specimen entries are abbreviated. Thus, the two specimens V.41663(1) and V.41663(2) are listed in the shorthand version "V.41663(1-2)", and the three specimens V.41613(1), V.41614(1) and V.41615(1) as "V.41613(1)-15(1)".
- (iii) Where an original collector's number existed prior to the museum registration number, this is mentioned in the remarks at the end of the entry.

Each entry includes the following bibliographic information: author, date, page and figure reference. Complete references are given in the bibliography at the end of the catalogue.

The catalogue contains entries up to January 1988.

Camera-ready copy for this catalogue has been prepared using this Museum's Database System (MDS) and associated word processing software. MDS is a package of software programs, written by Museum staff, which allows simple, ordered entry of data to a database, extensive editing facilities and a query-language based index and report generation facility. The package is written in 'BCPL' and runs on the Palaeontology Department's Cifer computer system under the Unix operating system. A version of MDS is available to run on the IBM PC and compatibles, and a 'C' language version is under consideration.

This is the first catalogue in the series prepared entirely by computer methods. It is hoped that later editions of this catalogue will be generated automatically from data entered during the registration, using MDS, of future accessions to the Department.

I would particularly like to thank Mr. A. Rissoné for his invaluable assistance with the application of computing techniques to this catalogue. Thanks are also due to Dr. G. F. Elliott, Dr. C. R. Hill, Dr. M. K. Howarth and Mr. C. H. Shute.



# Type and Figured Macrofossil Algae

## *Acanthochoonia barrandei* Hinde, 1884

V.53055(1), V.53057(1)-58(1) Hand specimens. Syntypes of *Acanthochoonia barrandei* Hinde, 1884. Upper Silurian, Stage E. Bubowitz, Prague, Bohemia [Czechoslovakia]. Barrande, J. Colln. Purchd 1855-57. Figd Hinde, G. J. 1884: 841; pl. 37, fig. 2a (V.53057(1)), fig. 2b (V.53058(1)), fig. 2d (V.53055(1)).

## *Acicularia antiqua* Pia, 1936

V.52031(1) Slide. Lower Cretaceous, Barremian/Aptian. Upper Musandam Formation. Jebel Hagab, Oman. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 16,17; pl. 1, figs 1,3.

## *Acicularia* cf. *archiaçi* Munier-Chalmas, 1922

V.24926(2), V.24927(6-7) Slides. Lower Oligocene, Rupelian. Corbula Clay. Rauville [Rauville-La-Place], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Morellet, L. & Morellet, J. 1939: 36,37; pl. 6, fig. 19 (V.24927(6)), fig. 20 (V.24927(7)), fig. 21 (V.24926(2)).

## *Acicularia gracilis* L. & J. Morellet, 1939

V.24876(1) Slide. Holotype of *Acicularia gracilis* L. & J. Morellet, 1939. Middle Eocene, Lutetian. Bracklesham Group, Selsey Formation, Bed Fisher 22b. Medmerry Farm, Selsey, Sussex, England. Davis, A. G. Colln. Presd Trustees of the Godman Fund 1934. Figd Morellet, L. & Morellet, J. 1939: 47,48; pl. 6, fig. 15.

## *Acicularia marginata* L. & J. Morellet, 1939

V.24926(1), V.24927(3-5) Slides. Paratypes of *Acicularia marginata* L. & J. Morellet, 1939. Lower Oligocene, Rupelian. Corbula Clay. Rauville [Rauville-La-Place], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Carpenter, W. B. 1862: pl. 11, fig. 31 (V.24927(4)), fig. 32 (V.24927(5)). Figd Morellet, L. & Morellet, J. 1939: 34,35; pl. 6, fig. 6 (V.24927(3)), fig. 7 (V.24926(1)), fig. 8 (V.24927(4)), fig. 9 (V.24927(5)).

## *Acicularia marginata* L. & J. Morellet, 1939

V.24927(1) Slide. Holotype of *Acicularia marginata* L. & J. Morellet, 1939. Lower Oligocene, Rupelian. Corbula Clay. Rauville [Rauville-La-Place], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Carpenter, W. B. 1862: pl. 11, fig. 28. Figd Morellet, L. & Morellet, J. 1939: 34,35; pl. 6, fig. 5.

## *Acicularia munieri* L. & J. Morellet, 1913

V.24918(1) Slide. Middle Eocene, Lutetian. Hauteville Beds. Hauteville, [Hauteville-Bocage], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Morellet, L. & Morellet, J. 1939: pl. 6, fig. 16.

## *Acicularia* sp.

V.41631(1) Slide. Lower Cretaceous, Barremian. Sarmord, Sulemania Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1958a: 255; pl. 45, fig. 2.

V.52033(1) Slide. Palaeocene/Lower Eocene. Salih Maleh, Batinah Coast, Oman. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 17; pl. 1, fig. 6. Figd Elliott, G. F. 1971b: 631; pl. 118, fig. 2.

## *Aciculella ogilvie-gordonae* Elliott, 1971

V.53903(1-2), V.53905(2) Slides. Paratypes of *Aciculella ogilvie-gordonae* Elliott, 1971. Upper Permian. Bellerophon Limestone. Plesch d'Inez, Grödener Valley [Incisies Valley], South Tirol [Dolomites], Italy. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Elliott, G. F. 1971b: 629; pl. 119, fig. 1 (V.53903(1)), fig. 2 (V.53903(2)), fig. 5 (V.53905(2)).

V.53904(1) Slide. Holotype of *Aciculella ogilvie-gordonae* Elliott, 1971. Upper Permian. Bellerophon Limestone. Plesch d'Inez, Grödener Valley [Incisies Valley], South Tirol [Dolomites], Italy. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Elliott, G. F. 1971b: 629; pl. 118, fig. 1.

**Acroporella assurbanipali Elliott, 1968**

V.52032(1) Slide. Holotype of *Acroporella assurbanipali* Elliott, 1968. Lower Cretaceous, Valanginian/Hauterivian. Garagu Formation. Well no. 116, Kirkuk, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 18; pl. 1, fig. 5.

**Actinoporella podolica (Alth, 1878)**

V.41579(1) Slide. Lower Cretaceous, Valanginian/Hauterivian. Sarmord Formation. Jebel Gara, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955b: 126; pl. 1, fig. 1. Figd Elliott, G. F. 1958a: pl. 47, fig. 5. Figd Elliott, G. F. 1968b: 19-21; pl. 1, fig. 4.

V.41579(2) Slide. Lower Cretaceous, Valanginian/Hauterivian. Sarmord Formation. Jebel Gara, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1958a: 255; pl. 47, fig. 5. Figd Elliott, G. F. 1968b: 19-21; pl. 1, fig. 4.

V.41630(1) Slide. Lower Cretaceous, Valanginian. Garagu Formation. Banik, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1958a: 255; pl. 45, fig. 1. Figd Elliott, G. F. 1968b: 19,20; pl. 1, fig. 2.

**Acicularia sp.1 of Elliott, 1955**

V.41589(1) See: *Terquemella bellovacina* Munier-Chalmas, 1920

V.41589(2) See: *Terquemella globularis* Elliott, 1956

**Acicularia sp.1 of L. & J. Morellet, 1939**

V.24917(1) Slide. Middle Eocene, Lutetian. Hauteville Beds. Hauteville [Hauteville-Bocage], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Carpenter, W. B. 1862: pl. 11, fig. 29. Figd Morellet, L. & Morellet, J. 1939: 35; pl. 1, fig. 17.

V.24918(5) Slide. Middle Eocene, Lutetian. Hauteville Beds. Hauteville [Hauteville-Bocage], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Morellet, L. & Morellet, J. 1939: 35; pl. 6, fig. 10.

**Acicularia sp.2 of Elliott, 1955**

V.41590(1) See: *Terquemella bellovacina* Munier-Chalmas, 1920

**Acicularia sp.2 of L. & J. Morellet, 1939**

V.24918(2-4) Slide. Middle Eocene, Lutetian. Hauteville Beds. Hauteville [Hauteville-Bocage], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Morellet, L. & Morellet, J. 1939: 36; pl. 6, fig. 22 (V.24918(2)), fig. 23 (V.24918(3)), fig. 24 (V.24918(4)).

**Acicularia sp.2? of L. & J. Morellet, 1939**

V.24927(2) Slide. Lower Oligocene, Rupelian. Corbula Clay. Rauville [Rauville-La-Place], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Morellet, L. & Morellet, J. 1939: 35; pl. 6, fig. 11.

V.52034(1) Slide. Lower Cretaceous, Valanginian/Hauterivian. Sarmord Formation. Jebel Gara, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 19-21; pl. 1, fig. 7.

**Algacites clavatoris Harris, 1939**

V.26225 Slide. Holotype of *Algacites clavatoris* Harris, 1939. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 79; pl. 17, figs 5,6.

V.26226 Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 79; pl. 16, fig. 2.

**Algacites sp.**

V.30916(1) Slide. Middle Jurassic, Bajocian. Middle Deltaic, Sycarham Series, *Otozamites beani* Bed. Cloughton Wyke, Yorkshire, England. Harris, T. M. Colln. Presd 1951. Figd Harris, T. M. 1961: 4, text-fig. 1a,b.



**Algites virgatus (Münster, 1842)**

**46674(1)** Hand specimen. **Holotype** of *Chondrites virgatus* Münster, 1842. Permian. Kupferschiefer, Bituminöser Mergelschiefer [Copper Slate]. Riechelsdorf, Bavaria, Federal Republic of Germany. Purchd Krantz, A. D. 1865. Figd Münster, G. 1842: pl. 15, fig. 18 (as *Chondrites virgatus*). Refd Stoneley, H. M. M. 1958: 309.

**Amphiroa elliotti Johnson, 1964**

**V.53081(1)** Slide. **Holotype** of *Amphiroa elliotti* Johnson, 1964. Palaeocene. Rayat, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964a: 209; pl. 2, fig. 6.

**V.53082(1)** Slide. Palaeocene. Rayat, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964a: 209; pl. 2, figs 4,5.

**Amphiroa iraquensis Johnson, 1964**

**V.53083(1)** Slide. Palaeocene. Suleimania [Sulemania Liwa], Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964a: 209; pl. 3, fig. 1.

**V.53084(1)** Slide. **Holotype** of *Amphiroa iraquensis* Johnson, 1964. Palaeocene. Galala, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964a: 209; pl. 3, fig. 2.

**Amphiroa sp.**

**V.11064a(1)** Slide. Palaeocene/Lower Eocene. Chorak Khan, Bayburt, Turkey. Colld Oswald, F. & Lynch, W. N. B. 1898. Presd 1904. Figd Elliott, G. F. 1981: 128, fig. 3. Slide prepared from hand specimen V.11064.

**Anchicodium sinbadi Elliott, 1970**

**V.54131(1)** Slide. **Holotype** of *Anchicodium sinbadi* Elliott, 1970. Derived Permian, in Cretaceous. Hawasina Formation. Jebel Qamar, Oman. Elliott, G. F. Colln. Presd 1969. Figd Elliott, G. F. 1970b: 328; pl. 61, figs 3,4.

**Anthracoporella mercurii Elliott, 1968**

**V.52035(1)** Slide. **Holotype** of *Anthracoporella mercurii* Elliott, 1968. Permian. Bih Dolomite. Wady Bih, Jebel Hagab, Oman. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 22,23; pl. 1, fig. 8.

**Anthracoporella spectabilis Pia, 1920**

**V.52036(1)** Slide. Derived Permian, in Triassic. Jebel Busyal, Oman. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 21,22; pl. 2, figs 1,2.

**Aphralysia garwoodi Hallet, 1970**

**V.53998(1)** Slide. **Holotype** of *Aphralysia garwoodi* Hallet, 1970. Lower Carboniferous, Viséan. Carboniferous Limestone, Yoredale Series, Simonstone Limestone. Skell Gill, near Askrigg, Wensleydale, Yorkshire, England. Presd Elliott, G. F. 1967. Figd Hallett, D. 1970: 879; pl. 1, fig. 2.

**Aphralysia jurassica Elliott, 1982**

**V.60941(1)** Slide. **Holotype** of *Aphralysia jurassica* Elliott, 1982. Middle Jurassic, Middle/Upper Bathonian. Great Oolite, White Limestone. Quenington Hill, Quenington, Cirencester, Gloucestershire, England. Colld Elliott, K. I. M. Presd Elliott, G. F. 1981. Figd Elliott, G. F. 1982c: 59, text-figs 4-6.

**Aphroditicodium aurantium Elliott, 1970**

**V.54134(1)** Slide. **Holotype** of *Aphroditicodium aurantium* Elliott, 1970. Lower Permian. Zinnar Formation. Ora, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1969. Figd Elliott, G. F. 1970b: 330; pl. 62, figs 1,2.

**Aphroditicodium sp.**

**V.59461(1)** Slide. Upper Permian. Nwabangyi Dolomite. Saan Scarp, east Burma. Colld Mitchell, A. H. G. Presd 1977. Figd Elliott, G. F. 1982a: 435, text-fig. 1b.

***Apophoretella dobunnorum* Elliott, 1974**

V.57656(1) Slide. Holotype of *Apophoretella dobunnorum* Elliott, 1974. Middle Jurassic, Bathonian. Great Oolite, Upper White Limestone. Daglingworth, Cirencester, Gloucestershire, England. Colld Elliott, G. F. Presd 1974. Figd Elliott, G. F. 1975a: 354; pl. 49, fig. 3.

***Arabicodium aegagrapiloides* Elliott, 1957**

V.41625(1) Slide. Lower Cretaceous. Hugf area, Oman. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1965b: 200; pl. 23, figs 3,4.

V.41625(2-5) Slide. Syntypes of *Arabicodium aegagrapiloides* Elliott, 1957. Lower Cretaceous. Hugf area, Oman. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1957a: 228; pl. 1, fig. 7 (V.41625(2)), fig. 8 (V.41625(3)), fig. 9 (V.41625(4)), fig. 10 (V.41625(5)).

***Arabicodium* sp.**

V.57657(1) Slide. Middle Jurassic, Bathonian. Great Oolite, Upper White Limestone. Daglingworth, Cirencester, Gloucestershire, England. Colld Elliott, G. F. Presd 1974. Figd Elliott, G. F. 1975a: 356; pl. 49, fig. 4.

***Archaeolithothamnium affine* Howe, 1919**

V.60922a(1) Slide. Miocene. Upper Coralline Limestone Formation. Wied Il Hamar, Malta. Colld Bosence, D. W. J. Presd 1982. Figd Bosence, D. W. J. 1983: 150; pl. 15, fig. 2 (erroneously as V.60921). Slide prepared from hand specimen V.60922.

***Archaeolithothamnium* aff. *affine* Howe, 1919**

V.53095(1) Slide. Lower Miocene. Sareshma, Rowanduz, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964b: 478; pl. 1, fig. 4.

***Archaeolithothamnium aschersoni* (Schwager, 1883)**

V.53079(1) Slide. Palaeocene. Rowanduz, Erbil Liwa, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964a: 208; pl. 1, fig. 3.

***Archaeolithothamnium batalleri* Lemoine, 1928**

V.53088(1) Slide. Palaeocene. Sirwan-Balambo, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964a: 208; pl. 1, fig. 1.

***Archaeolithothamnium batuense* Airoidi, 1936**

V.53096(1) Slide. Lower Miocene. Sareshma, Rowanduz, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964b: 477; pl. 1, figs 1,3.

***Archaeolithothamnium cyrenaicum* Raineri, 1924**

V.53094(1) Slide. Lower Miocene, Burdigalian. Lailuk, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964b: 477; pl. 1, fig. 2.

***Archaeolithothamnium intermedium* Raineri, 1924**

V.60923a(1) Slide. Miocene. Upper Coralline Limestone Formation. Mgvar, Malta. Colld Bosence, D. W. J. Presd 1982. Figd Bosence, D. W. J. 1983: 150; pl. 15, figs 3,4 (erroneously as V.60922). Slide prepared from hand specimen V.60923.

***Archaeolithothamnium* cf. *lugeoni* Pfender, 1926**

V.53695(1) Slide. Upper? Eocene. East of Batu Gading, Sarawak. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Johnson, J. H. 1962: 154; pl. 1, fig. 3.

**Archaeolithothamnium cf. myriosporum**  
**Johnson, 1957**

V.53705(1) Slide. Lower? Miocene.  
Batu Gading, Sarawak. Ogilvie-Gordon,  
M. M. Colln. Presd 1970. Figd Johnson, J.  
H. 1962: 155; pl. 1, fig. 4.

**Archaeolithothamnium nummuliticum**  
**(Gümbel, 1861)**

V.53085(1) Slides. Palaeocene.  
Sirwan-Balambo, Iraq. Presd Johnson, J.  
H. & Iraq Petroleum Co. 1967. Figd  
Johnson, J. H. 1964a: 298; pl. 1, fig. 5.

V.53086(1) Slide. Palaeocene. Galala,  
Iraq. Presd Johnson, J. H. & Iraq  
Petroleum Co. 1967. Figd Johnson, J. H.  
1964a: 208; pl. 2, fig. 1.

V.53701(1)-02(1) Slides. Eocene. West  
of Batu Gading, Sarawak.  
Ogilvie-Gordon, M. M. Colln. Presd 1970.  
Figd Johnson, J. H. 1962: 154; pl. 1, fig.  
1 (V.53702(1)), fig. 2 (V.53701(1)).

**Archaeolithothamnium oulianovi Pfender,**  
**1926**

V.53087(1) Slide. Palaeocene.  
Rowanduz, Erbil Liwa, Iraq. Presd  
Johnson, J. H. & Iraq Petroleum Co. 1967.  
Figd Johnson, J. H. 1964a: 208; pl. 1, fig.  
4.

**Archaeolithothamnium perplexum Johnson,**  
**1964**

V.53072(1) Slide. Holotype of  
*Archaeolithothamnium perplexum* Johnson,  
1964. Palaeocene. Ghilizarda, Iraq. Presd  
Johnson, J. H. & Iraq Petroleum Co. 1967.  
Figd Johnson, J. H. 1964a: 209; pl. 2, figs  
2,3.

V.53073(1) Slide. Palaeocene.  
Rowanduz, Erbil Liwa, Iraq. Presd  
Johnson, J. H. & Iraq Petroleum Co. 1967.  
Figd Johnson, J. H. 1964a: 209; pl. 2, fig.  
7.

**Archaeolithothamnium sp.**

V.44845(1) Slide. Palaeocene. Kolosh  
Formation. Rowanduz, Erbil Liwa, Iraq.  
Presd Elliott, G. F. & Iraq Petroleum Co.  
1962. Figd Elliott, G. F. 1963a: pl. 47, fig.  
1.

**Arthrocardia sp.**

V.53074(1) Slide. Middle Eocene. Jabal  
Faiyah, Trucial Oman. Presd Johnson, J.  
H. & Iraq Petroleum Co. 1967. Figd  
Johnson, J. H. 1964a: 210; pl. 3, fig. 4.

**Atractyliopsis darariensis Elliott, 1968**

V.52015(1), V.52037(3) Slides.  
**Paratypes** of *Atractyliopsis darariensis*  
Elliott, 1968. Upper Permian. Darari  
Formation. Ora, Mosul Liwa, Iraq. Elliott,  
G. F. Colln. Presd 1966. Figd Elliott, G. F.  
1968b: 24; pl. 2, fig. 3 (V.52015(1)), fig. 4  
(V.52037(3)). Figd Elliott, G. F. 1971b: pl.  
118, fig. 3 (V.52037(3)).

V.52037(1) Slide. **Holotype** of  
*Atractyliopsis darariensis* Elliott, 1968.  
Upper Permian. Darari Formation. Ora,  
Mosul Liwa, Iraq. Elliott, G. F. Colln.  
Presd 1966. Figd Elliott, G. F. 1968b: 24;  
pl. 2, fig. 5.

V.52037(2) Slide. **Paratype** of  
*Atractyliopsis darariensis* Elliott, 1968.  
Upper Permian. Darari Formation. Ora,  
Mosul Liwa, Iraq. Elliott, G. F. Colln.  
Presd 1966. Figd Elliott, G. F. 1968b:  
24,25; pl. 2, fig. 4. Figd Elliott, G. F.  
1971b: pl. 118, fig. 3.

**Atractyliopsis lastensis Accordi, 1956**

V.53906(1) Slide. Upper Permian.  
Bellerophon Limestone. Plesch d'Inez,  
Grödener Valley [Incisies Valley], South  
Tirol [Dolomites], Italy. Ogilvie-Gordon,  
M. M. Colln. Presd 1970. Figd Elliott, G.  
F. 1971b: 631; pl. 119, fig. 4.



**Bevocastria conglobata Garwood, 1931**

V.55483(1) Slide. Paratype of *Bevocastria conglobata* Garwood, 1931. Lower Carboniferous, Tournaisian, C1. Lower Border Group, Main Algal Beds. Near Hole of Lyne, Cumberland [Cumbria], England. Garwood, E. J. Colln. Presd 1950. Figd Garwood, E. J. 1931: 141; pl. 12, fig. 2.

V.55489(1) Slide. Holotype of *Bevocastria conglobata* Garwood, 1931. Lower Carboniferous, Tournaisian, C1. Lower Border Group, Main Algal Beds. The Beck, Christianbury, Bewcastle, Cumberland [Cumbria], England. Garwood, E. J. Colln. Presd 1950. Figd Garwood, E. J. 1931: 141; pl. 12, fig. 1.

**Bevocastria sp.**

V.55482(1) Slide. Lower Carboniferous, Tournaisian. Lower Border Group, Main Algal Beds. Birky Cleugh, Bewcastle, Cumberland [Cumbria], England. Garwood, E. J. Colln. Presd 1950. Figd Garwood, E. J. 1931: 141; pl. 12, fig. 3b.

**Botryococcus braunii Kützing, 1849**

V.25297(1)-99(1) Hand specimen V.25297, Slides V.25298-9. Upper Triassic, Rhaetian. Naiadita Bed. Henleaze Road, Bristol, Gloucestershire [Avon], England. Kellaway, G. A. & Harris, T. M. Colln. Presd 1937. Figd Harris, T. M. 1938: 9-12, text-fig, 2a (V.25297(1)), 2b (V.25299(1)), 2c-g (V.25298(1)).

**Boueina hochstetteri Toula, 1884**

V.54135(1)-36(1) Slides. Lower Cretaceous, Valanginian/Hauterivian. Garagu Formation. Well no. 116, Kirkuk, Iraq. Elliott, G. F. Colln. Presd 1969. Figd Elliott, G. F. 1970b: 332; pl. 61, fig. 1 (V.54136(1)), fig. 2 (V.54135(1)).

**Boueina hochstetteri var. liasica Le Maitre, 1937**

V.51381(1) Slide. Lower Jurassic, Middle/Upper Lias. Sekhaniyan Formation. Sekhaniyan, Surdash, Sulemania Liwa, Iraq. Presd Elliott, G. F. 1964. Figd Elliott, G. F. 1965b: 200; pl. 23, fig. 1.

**Boueina cf. pygmaea Pia, 1936**

V.51385(1) Slide. Upper Cretaceous, Cenomanian. Bou Saada, Algeria. Presd Elliott, G. F. 1964. Figd Elliott, G. F. 1965b: 200; pl. 24, fig. 2,6.

**Boueina spp.**

V.51382(1) Slide. Lower Cretaceous, Upper Aptian. Ain Keiriane, Algeria. Presd Elliott, G. F. 1964. Figd Elliott, G. F. 1965b: 200; pl. 24, figs 3,4.

V.51383(1)-84(1) Slides. Upper Cretaceous, Cenomanian. Djebel Meketsi, Algeria. Presd Elliott, G. F. 1964. Figd Elliott, G. F. 1965b: 200; pl. 24, fig. 1 (V.51383(1)), fig. 5 (V.51384(1)).

**Bythotrephis scotica Kidston, 1886**

V.62293(1)-94(1) (ex. V.193) Hand specimens. Lower Carboniferous, Tournaisian. Lower Border Group, Main Algal Beds. Glencartholm, Eskdale, Dumfriesshire [Dumfries and Galloway], Scotland. Purchd Damon, R. 1883. Figd Kidston, R. 1903: 743; pl. 1, fig. 2 (V.62293(1)), fig. 3 (V.62294(1)).

**Callisphenus gracilis Høeg, 1937**

V.24775(1,2) Hand specimen. Syntypes of *Callisphenus gracilis* Høeg, 1937. Silurian, Wenlock. Kommersøy Island, Holmestrand, Oslo, Norway. Colld Johnson, M. S. Presd 1936. Figd Høeg, O. A. 1937: 43-46; pl. 1, fig. 1 (V.24775(1,2)), figs 2-4, pl. 2, fig. 1 (V.24775(1)), figs 2-4 (V.24775(2)).

**Cayeuxia kurdistanensis Elliott, 1957**

V.41617(2), V.41618(1) Slides. Paratypes of *Cayeuxia kurdistanensis* Elliott, 1957. Lower Cretaceous, Aptian? Balki, Erbil Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1957c: 790,791; pl. 25, fig. 8 (V.41617(2)), fig. 9 (V.41618(1)).

V.41619(1) Slide. Holotype of *Cayeuxia kurdistanensis* Elliott, 1957. Lower Cretaceous, Aptian? Rania, Erbil Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1957c: 790,791; pl. 25, fig. 10.

**Cayeuxia piaae Frollo, 1938**

V.41617(1) Slide. Lower Cretaceous, Aptian? Balki, Erbil Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1957c: 790; pl. 25, fig. 6,7.

**Chara escheri Unger, 1860**

V.28559(1) Slide. Oligocene/Miocene. Rochette, Switzerland. La Harpe, T. de Colln. Presd 1950. Figd Croft, W. N. 1952: 212, text-fig. 7a,c. pl. 19, figs 21-23. Gyrogonite. Slide prepared from hand specimen V.17236.

V.28560(1) Slide. Oligocene/Miocene. Rochette, Switzerland. La Harpe, T. de Colln. Presd 1950. Figd Croft, W. N. 1952: 212; pl. 19, figs 24-27. Oospore. Slide prepared from hand specimen V.17236.

**Chara helicteres Brongniart, 1822**

V.18330(1) Slide. Upper Eocene/Lower Oligocene, Priabonian/Rupelian. Bembridge Beds. Bembridge Foreland, Isle of Wight, England. Groves, J. Colln. Presd 1926. Figd Groves, J. 1926: 169; pl. 12, fig. 6. Gyrogonites. Specimens missing from cell-mount.

**Chara hispida L. 1753**

V.28356(1) Slide. Recent. Ireland. Figd Croft, W. N. 1952: text-figs 1b,7b. Fruit.

**Chara knowltoni Seward, 1894**

V.2427(1), V.3114a(1), V.51548-55 See: *Circonitella knowltoni* (Seward, 1894)

**Chara langeri Ettingshausen, 1872**

V.13980(1) See: *Rhabdochara langeri* (Ettingshausen, 1872)

**Chara malcolmsoni J. de C. Sowerby, 1840**

V.21472(1) Slide. Holotype of *Chara malcolmsoni* J. de C. Sowerby, 1840. Palaeocene/Eocene. Intertrappean Series? Munoor, India. Presd Geological Society 1911. Figd Sowerby, J. de C. 1840: 551 and explanatory plate. Ex. Geol. Soc. 10408.

**Chara medicaginula (Lamarck, 1884)**

V.18328(1), V.18329(1-10) See: *Gyrogona wrighti* (Salter ex Reid & Groves, 1921)

**Chara (Tolypella?) perpusilla Groves, 1926**

V.18334(1-4) Slide. Syntypes of *Chara (Tolypella?) perpusilla* Groves, 1926. Lower Oligocene, Rupelian. Bembridge Marls. Whitecliff Bay, Isle of Wight, England. Colld 1917. Groves, J. Colln. Presd 1926. Figd Groves, J. 1926: 173, text-fig. 20. Gyrogonites.

**Chara sp.**

V.18333(1-3) Slide. Lower Oligocene, Rupelian. Bembridge Marls. Bembridge Foreland, Isle of Wight, England. Groves, J. Colln. Presd 1926. Figd Groves, J. 1926: 167; pl. 12, fig. 11 (V.18333(2)), fig. 15 (V.18333(1)), fig. 16 (V.18333(3)). Corticate stem. Specimens originally figured as V.18333a (a=(1)), V.18333h (h=(2)) and V.18333j (j=(3)).

V.18333(4-5) Slide. Lower Oligocene, Rupelian. Bembridge Marls. Bembridge Foreland, Isle of Wight, England. Groves, J. Colln. Presd 1926. Figd Groves, J. 1926: 167; pl. 12, fig. 10 (V.18333(4)), figs 13,14 (V.18333(5)). Nodes. Originally figured as V.18333b (b=(4)) and V.18333d (d=(5)).

V.18333(6) Slide. Lower Oligocene, Rupelian. Bembridge Marls. Bembridge Foreland, Isle of Wight, England. Groves, J. Colln. Presd 1926. Figd Groves, J. 1926: 167; pl. 12, fig. 12. Ecorticate stem. Originally figured as V.18333i (i=(6)).

**Chara subglobosa Groves, 1926**

V.18331(1-14) See: *Sphaerochara subglobosa* (Groves, 1926)

**Chara tuberculata Lyell, 1826**

V.18320(1-23) See: *Harrisichara tuberculata* (Lyell, 1826)

**Chara vasiformis Reid & Groves, 1921**

V.18332(1-12) Slide. Upper Eocene, Priabonian. Bembridge Limestone. Saltmead Ledge, near Elmsworth, Isle of Wight, England. Colld Colenutt, G. W. & Groves, J. 1919. Groves, J. Colln. Presd 1926. Figd Groves, J. 1926: 171; pl. 13, fig. 9 (V.18332(2)?, V.18332, V.18332(4), V.18332(5)). Gyrogonites.

**Chara vectensis Groves, 1926**

V.18321(1-21), V.18322(1-6)  
See: *Stephanochara vectensis* (Groves, 1926)

**Chara vespiformis Groves, 1926**

V.18326(1-6) Slide. Upper Eocene/Lower Oligocene, Priabonian/Rupelian. Bembridge Beds. Bembridge Foreland, Isle of Wight, England. Colld 1917. Groves, J. Colln. Presd 1926. Figd Groves, J. 1926: 171,172; pl. 12, fig. 5 (V.18326(1),(4),(6)). Gyrogonites.

V.18327(1-7) Slide. Syntypes of *Chara vespiformis* Groves, 1926. Upper Eocene/Lower Oligocene, Priabonian/Rupelian. Bembridge Beds. Bembridge Foreland, Isle of Wight, England. Colld 1917. Groves, J. Colln. Presd 1926. Figd Groves, J. 1926: 171,172, text-fig. 18 (V.18327(5)?), pl. 12, fig. 7 (V.18327(2)?,(5),(4)?). Gyrogonites.

**Charaxis durlstonense Harris, 1939**

V.26262(1) Hand specimen. Holotype of *Charaxis durlstonense* Harris, 1939. Upper Jurassic, Portlandian. Purbeck Beds. Durlston [Durlston Bay?], Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 67, text-figs 14,15, pl. 16, fig. 10. Specimen ground away at successive levels so that fig. 10 and most of text-figs 14,15 do not exist.

**Chondrites virgatus Münster, 1842**

46674(1) See: *Algites virgatus* (Münster, 1842)

**Circonitella knowltoni (Seward, 1894)**

V.2427(1) Slide. Upper Jurassic/Lower Cretaceous, Portlandian/Berriasian. Purbeck Beds. Purbeck, Dorset, England. Presd Millar, Dr. 1888. Figd Seward, A. C. 1898: 224, text-fig. 45a,b.

V.3114a(1) Slide. Lower Cretaceous, Wealden. Cliffend, near Hastings, Sussex, England. Presd Rufford, P. 1885. Figd Watson, J. 1969: 215-217, text-fig. 5. Slide prepared from hand specimen V.3114. Missing from collections.

V.51548(1) (ex. V.1070a) Hand specimen. Holotype of *Chara knowltoni* Seward, 1894. Lower Cretaceous, Wealden. Cliffend, near Hastings, Sussex, England. Presd Rufford, P. 1885. Figd Seward, A. C. 1894: 13, 14, text-fig. 1 (as *Chara knowltoni*). Watson (1969), was unable to locate the holotype, which is one of many gyrogonites in a block of matrix. Individual specimens were prepared by maceration, from which the neotype and other examples for publication were selected (see *Circonitella knowltoni* V.51555 and V.51549-54 entries).

V.51549-54 Slides. Lower Cretaceous, Wealden. Cliffend, near Hastings, Sussex, England. Presd Rufford, P. 1885. Figd Watson, J. 1969: 215-217, text-fig. 3 (V.51549), text-fig. 4 (V.51550), text-fig. 6 (V.51551), pl. 1, fig. 1 (V.51552), fig. 3, (V.51553), fig. 4 (V.51554). Gyrogonites prepared from block V.51548 (originally V.1070a).

V.51555 Slide. Neotype of *Circonitella knowltoni* (Seward, 1894). Lower Cretaceous, Wealden. Cliffend, near Hastings, Sussex, England. Presd Rufford, P. 1885. Figd Watson, J. 1969: 215-217; pl. 1, fig. 5. Gyrogonite prepared from block V.51548 (originally V.1070a).

**Clavator bradleyi Harris, 1939**

V.26183 Slide. Holotype of *Clavator bradleyi* Harris, 1939. Lower Cretaceous, Berriasian. Upper Purbeck Beds, 0.9m below Unio Bed. Road cutting Poxwell Lodge, Dorset, England. Sylvester-Bradley, P. C. & Harris, T. M. Colln. Presd 1939. Figd Harris, T. M. 1939: 53, pl. 16, figs 3,4,7. Gyrogonite.



**Clavator bradleyi Harris, 1939**

**V.26184-85** Slides. Lower Cretaceous, Berriasian. Upper Purbeck Beds, 0.9m below Unio Bed. Road cutting Poxwell Lodge, Dorset, England. Sylvester-Bradley, P. C. & Harris, T. M. Colln. Presd 1939. Figd Harris, T. M. 1939: 53; pl. 16, fig. 1 (V.26184), fig. 5 (V.26185). Oogonia.

**V.26186** Slide. Lower Cretaceous, Berriasian. Upper Purbeck Beds, 0.9m below Unio Bed. Road cutting Poxwell Lodge, Dorset, England. Sylvester-Bradley, P. C. & Harris, T. M. Colln. Presd 1939. Figd Harris, T. M. 1939: 53, text-fig. 8 f-j. Gyrogonite.

**Clavator grovesi Harris, 1939**

**V.26132** Slide. **Holotype** of *Clavator grovesi* Harris, 1939. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham?, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 46-51; pl. 12, figs 1-3. Utricle of oogonium. Specimen has deteriorated.

**V.26133** Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham?, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 46-51; pl. 12, figs 4-6. Utricle of oogonium. Specimen missing from cell-mount.

**V.26145** Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 46-51; pl. 11, fig. 5. Cortex.

**V.26147** Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Osmington Mills, Dorset, England. Sylvester-Bradley, P. C. & Harris, T. M. Colln. Presd 1939. Figd Harris, T. M. 1939: 46-51; pl. 17, fig. 11. Oogonia.

**Clavator grovesi Harris, 1939**

**V.26148** Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Osmington Mills, Dorset, England. Sylvester-Bradley, P. C. & Harris, T. M. Colln. Presd 1939. Figd Harris, T. M. 1939: 46-51; pl. 17, fig. 12. Node.

**V.26149-50** Slides. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Osmington Mills, Dorset, England. Sylvester-Bradley, P. C. & Harris, T. M. Colln. Presd 1939. Figd Harris, T. M. 1939: 46-51; pl. 11, fig. 4 (V.26150), pl. 17, fig. 8 (V.26149). Cortex.

**V.26151** Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Osmington Mills, Dorset, England. Sylvester-Bradley, P. C. & Harris, T. M. Colln. Presd 1939. Figd Harris, T. M. 1939: 46-51; pl. 11, fig. 1. Internode.

**V.26152** Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Moigne Down, Dorset, England. Sylvester-Bradley, P. C. & Harris, T. M. Colln. Presd 1939. Figd Harris, T. M. 1939: 46-51; pl. 17, figs 9,10. Oogonium.

**V.26153** Slide. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. By Water Hole, Moigne Down, Dorset, England. Sylvester-Bradley, P. C. & Harris, T. M. Colln. Presd 1939. Figd Harris, T. M. 1939: 46-51; pl. 11, fig. 2. Oogonium.

**V.26134, V.26140** Slides. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 46-51; pl. 11, fig. 6 (V.26134), pl. 17, fig. 13 (V.26140). Nodes.

**V.26135** Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 46-51; pl. 11, fig. 9. Leaf with antheridial base.

## **Clavator grovesi Harris, 1939**

V.26136 Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham?, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 46-51; pl. 11, fig. 3. Cortex.

V.26137-38 Slides. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 46-51; pl. 11, fig. 7 (V.26138), fig. 8 (V.26137). Leaves.

V.26139 Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 46-51; pl. 12, fig. 7. Oogonium. Specimen missing from cell-mount.

V.26141 Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham?, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 46-51; pl. 12, fig. 9. Oogonium.

V.26142-44, V.26146 Slides. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 46-51; pl. 10, figs 1-3 (V.26146), figs 4-6 (V.26144), figs 7-9 (V.26143), figs 10-12 (V.26142). Gyrogonites. Specimen (V.26142) missing from cell-mount.

## **Clavator reidi Groves, 1916**

V.13277(1), V.13282(2) Hand specimens. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Swanage, Dorset, England. Reid, C. R. & Groves, J. Colln. Presd Groves, J. 1918. Figd Reid, C. R. & Groves, J. 1916: 252-256; pl. 8, fig. 2 (V.13277(1)), fig. 7 (V.13282(2)) (all as *Clavator* sp.). Utricles.

## **Clavator reidi Groves, 1916**

V.13278(1) Hand specimen. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Swanage, Dorset, England. Reid, C. R. & Groves, J. Colln. Presd Groves, J. 1918. Figd Reid, C. R. & Groves, J. 1916: 252-256; pl. 8, fig. 3 (as *Clavator* sp.). Oogonium.

V.13279(1) Hand specimen. Lectotype of *Clavator reidi* Groves, 1916. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Swanage, Dorset, England. Reid, C. R. & Groves, J. Colln. Presd Groves, J. 1918. Figd Reid, C. R. & Groves, J. 1916: 252-256; pl. 8, fig. 4 (as *Clavator* sp.). Ref. Harris, T. M. 1939: 17. Fruits and utricles.

V.13280(1), V.13285(1)-86(1) Hand specimens. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Swanage, Dorset, England. Reid, C. R. & Groves, J. Colln. Presd Groves, J. 1918. Figd Reid, C. R. & Groves, J. 1916: 252-256; pl. 8, fig. 5 (V.13280(1)), figs 11,12 (V.13285(1)), fig. 13 (V.13286(1)) (all as *Clavator* sp.). Nodes.

V.13281(1), V.13283(1) Hand specimens. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Swanage, Dorset, England. Reid, C. R. & Groves, J. Colln. Presd Groves, J. 1918. Figd Reid, C. R. & Groves, J. 1916: 252-256; pl. 8, fig. 6 (V.13281(1)), fig. 8 (V.13283(1)) (all as *Clavator* sp.). Fruits.

V.13282(1), V.13284(1) Hand specimens. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Swanage, Dorset, England. Reid, C. R. & Groves, J. Colln. Presd Groves, J. 1918. Figd Reid, C. R. & Groves, J. 1916: 252-256; pl. 8, fig. 9 (V.13282(1)), fig. 10 (V.13284(1)) (all as *Clavator* sp.). Internodes.



**Clavator reidi Groves, 1916**

V.26001, V.26025-26, V.26043, V.26044-45, V.26047, V.26049, V.26052, V.26060, V.26065, V.26072-73 Slides. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 16-41, text-fig. 2,3 (V.26060), 4 (V.26001), pl. 3, fig. 1 (V.26025), pl. 4, fig. 1 (V.26072), fig. 2 (V.26073), fig. 3 (V.26049), fig. 5 (V.26026), fig. 7 (V.26047), fig. 8 (V.26044), fig. 9 (V.26045), fig. 10 (V.26043), pl. 6, fig. 8 (V.26052), fig. 10 (V.26065). Nodes.

V.26002, V.26004, V.26012, V.26017, V.26029, V.26032, V.26039, V.26041, V.26069-70, V.26092 Slides. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 16-41; pl. 3, fig. 2 (V.26012), fig. 3 (V.26002), fig. 4 (V.26069), fig. 5 (V.26004), fig. 9 (V.26092), pl. 5, fig. 1 (V.26032), fig. 3 (V.26039), fig. 6 (V.26070), fig. 7 (V.26017), fig. 9 (V.26029), fig. 10 (V.26041). Internodes. Specimens (V.26004, V.26039) missing from cell-mount.

V.26003, V.26005-07, V.26011, V.26034, V.26057, V.26059, V.26066, V.26090 Slides. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 16-41; pl. 1, fig. 1 (V.26007), fig. 3 (V.26011), fig. 5 (V.26003), fig. 7 (V.26006), fig. 8 (V.26005), pl. 3, fig. 6 (V.26057), fig. 7 (V.26059), fig. 8 (V.26090), pl. 5, fig. 4 (V.26066), fig. 5 (V.26034). Sterile leaves. Specimen (V.26011) missing from cell-mount.

V.26008, V.26010 Slides. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 16-41; pl. 1, fig. 2 (V.26008), fig. 4 (V.26010). Male leaves.

**Clavator reidi Groves, 1916**

V.26013-14, V.26016, V.26018, V.26020-21, V.26024, V.26055, V.26061, V.26089 Slides. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham?, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 16-41; pl. 7, fig. 1 (V.26024), fig. 4 (V.26055), fig. 8 (V.26018), pl. 8, fig. 1 (V.26021), fig. 3 (V.26016), fig. 8, (V.26013), fig. 9 (V.26020), fig. 10 (V.26014), pl. 9, fig. 5 (V.26061), fig. 6 (V.26089). Oogonia. Specimen (V.26020) missing from cell-mount.

V.26015 Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham?, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 16-41; pl. 7, fig. 5. Oogonial branch. Specimen missing from cell-mount.

V.26019, V.26054, V.26062-64, V.26067, V.26077, V.26079, V.26085, V.26088, V.26091 Slides. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 16-41; pl. 7, fig. 2 (V.26079), fig. 9 (V.26054), fig. 10, (V.26077), pl. 8, fig. 2 (V.26064), fig. 4 (V.26019), fig. 5 (V.26062), fig. 6 (V.26067), fig. 7 (V.26085), pl. 9, fig. 2 (V.26088), fig. 4 (V.26091), fig. 11 (V.26063). Oogonia. Specimen (V.26063) missing from cell-mount.

V.26022, V.26048 Slides. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham?, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 16-41, text-fig. 5 (V.26022), pl. 4, fig. 4 (V.26048). Nodes. Most of V.26048 destroyed by serial sectioning.

V.26023, V.26056 Slides. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham?, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 16-41; pl. 6, figs 1-4 (V.26023), fig. 5 (V.26056). Nodal cortex.



**Clavator reidi Groves, 1916**

V.26027-28, V.26030-31, V.26033, V.26035-38, V.26040, V.26042 Slides. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 16-41; pl. 2, fig. 1 (V.26028), fig. 2 (V.26030), fig. 3 (V.26033), fig. 4 (V.26031), fig. 5 (V.26027), fig. 6 (V.26042), fig. 7 (V.26037), fig. 8 (V.26035), fig. 9 (V.26040), fig. 10 (V.26036), fig. 11 (V.26038). Axial internodes. Specimens (V.26033, V.26040) missing from cell-mounts.

V.26046 Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 16-41; pl. 4, fig. 6, pl. 5, fig. 2. Node and leaves.

V.26050, V.26068 Slides. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 16-41; pl. 4, fig. 6 (V.26050), fig. 9 (V.26068). Nodal cortex.

V.26051 Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 16-41; pl. 4, fig. 7. Internodal cortex.

V.26053, V.26058, V.26074-76, V.26080-81, V.26084, V.26086-87, V.26093 Slides. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 16-41; pl. 9, fig. 1 (V.26084), figs 7-9 (V.26093), fig. 10 (V.26080), pl. 10, figs 13-15 (V.26086), figs 16-18 (V.26087), pl. 11, fig. 3 (V.26081), pl. 17, fig. 1 (V.26053), fig. 2 (V.26074), fig. 3 (V.26076), fig. 4 (V.26075), fig. 7 (V.26058). Gyrogonites. Specimens (V.26080, V.26093) missing from cell-mounts.

**Clavator reidi Groves, 1916**

V.26071 Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 16-41; pl. 7, fig. 6. Oogonial leaf.

**Clavator sp.**

V.13277(1)-86(1) See: **Clavator reidi** Groves, 1916

**Clavator westi Costin, 1975**

V.44888, V.44892, V.44894, V.44898-902, V.44905 Slides. Upper Jurassic, Portlandian. Lower Purbeck Beds, Great Dirt Bed, Charophyte Chert. Portesham Quarry, Dorset, England. Colln West, I. M. 1961. Presd Harris, T. M. 1962. Figd Costin, J. 1975: 424,426,427; pl. 57, fig. 1 (V.44898), fig. 2 (V.44900), fig. 3 (V.44899), fig. 4 (V.44888), fig. 6 (V.44905), fig. 7 (V.44892), fig. 8 (V.44894), fig. 9 (V.44902), fig. 10 (V.44901). Gyrogonites.

V.44893 Slide. **Holotype** of *Clavator westi* Costin, 1975. Upper Jurassic, Portlandian. Lower Purbeck Beds, Great Dirt Bed, Charophyte Chert. Portesham Quarry, Dorset, England. Colln West, I. M. 1961. Presd Harris, T. M. 1962. Figd Costin, J. 1975: 424,426,427; pl. 57, fig. 5. Gyrogonite.

**Clypeina jurassica Favre, 1927**

V.52038(1)-39(1), V.52041(1) Slides. Upper Jurassic. Najmah Formation. Well no. 117, Kirkuk, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 29-32; pl. 3, fig. 2 (V.52038(1)), fig. 3 (V.52039(1)), fig. 5 (V.52041(1)).

V.52040(1) Slide. Upper Jurassic. Well no. 28, Dukhan, Qatar. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 29-32; pl. 3, fig. 4.

V.52044(1)-46(1) Slides. Upper Jurassic. Well no. 2, Dukhan, Qatar. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 29-32; pl. 4, fig. 4 (V.52044(1)), fig. 5 (V.52045(1)), fig. 6 (V.52046(1)).

**Clypeina lucasi Emberger, 1956**

V.52042(1) Slide. Lower Cretaceous, Valanginian. Hugf area, Oman. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 32; pl. 5, fig. 4.

**Clypeina marteli Emberger, 1956**

V.54042(2) Slide. Lower Cretaceous, Valanginian. Hugf area, Oman. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 32,33; pl. 4, fig. 1.

**Clypeina merienda Elliott, 1955**

V.41586(1)-87(1) Slides. Syntypes of *Clypeina merienda* Elliott, 1955. Palaeocene. Sinjar Formation. Sirwan, Sulemania Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955b: 127; pl. fig. 8 (V.41586(1)), fig.9 (V.41587(1)). Figd Elliott, G. F. 1968b: 35; pl. 4, fig. 8 (V.41587(1)).

V.52043(1) Slide. Palaeocene. Sinjar Formation. Koi Sanjak, Erbil Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 35; pl. 4, figs 2,7.

**Clypeina parvula Carozzi, 1946**

V.52049(1)-50(1) Slides. Lower Cretaceous, Valanginian. Garagu Formation. Well no. 116, Kirkuk, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 33,34; pl. 5, fig. 5 (V.52049(1)), fig. 6 (V.52050(1)).

**Clypeina pezanti L. & J. Morellet, 1922**

V.24920(1-3) Slide. Middle Eocene, Lutetian. Hauteville Beds. Hauteville [Hauteville-Bocage], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Carpenter, W. B. 1862: pl. 10, fig. 15 (V.24920(2) as *Dactylopora clypeina*), fig. 16 (V.24920(3) as *Dactylopora digitata*). Figd Morellet, L. & Morellet, J. 1939: pl. 6, fig. 25 (V.24920(2)), fig. 26 (V.24920(3)), fig. 27 (V.24920(1)).

**Clypeina sp.**

V.52047(1) Slide. Palaeocene. Umm er Rudhama Formation, Ghurna Beds. Al Ghurra, Diwaniya Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 36; pl. 5, fig. 2.

**Clypeina? sp.**

V.41598(1) Slide. Permian. Basal Santana Formation. Harur, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1968b: 36; pl. 5, fig. 1.

V.52048(1) Slide. Permian. Top Zinnar Formation. Harur, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 36; pl. 5, fig. 3.

**Clypeina? solkani Conrad & Radoičić, 1971**

V.41632(1), V.41810(1) Slide. Lower Cretaceous, Aptian/Albian. Surdash, Sulemania Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1958a: 255; pl. 45, fig. 4 (V.41632(1)), pl. 48, fig. 1 (V.41810(1)) (both as *Munieria baconica*).

V.52078(1-3) Slide. Lower Cretaceous, Aptian. Qamchuqa Formation. Ru Kuchuk, Chama, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 57,58; pl. 15, fig. 3 (V.52078(1)), fig. 4 (V.52078(2)), fig. 6 (V.52078(3)) (all as *Munieria baconica*).

**Cretacicrusta dubiosa Elliott, 1972**

V.27998(1) Slide. Holotype of *Cretacicrusta dubiosa* Elliott, 1972. Lower Cretaceous, Upper Aptian, *Nutfieldensis* zone. Yellow Sponge Gravel. Little Coxwell Pit, Faringdon, Berkshire, [Oxfordshire], England. Colld Thomas, H. D. Presd 1949. Figd Elliott, G. F. 1972a: 501-502; pl. 100, figs 1-4, pl. 101 figs 1,2.

**Cyclocrinites hospitalis (Salter, 1873)**

V.53052(1) (ex. S.3434) Hand specimen. Upper Ordovician, Caradocian. Cheney Longville, SE of Bishops Castle, Shropshire, England. La Touche, Rev. W. M. de Colln. Presd 1926. Figd La Touche, J. D. 1884: 30; pl. 3, fig. 48 (as *Sphaerospongia hospitalis*).

**Cyclocrinites melliflua (Salter, 1865)**

V.53048(1)-49(1) Hand specimens. Syntypes of *Sphaerospongia melliflua* Salter, 1865. Lower Silurian. Niti, India. Strachey, R. Colln. Figd Salter, J. W. 1865: 48; pl. 5, figs 4,4a,5 (V.53048(1)), figs 6,6a (V.53049(1)) (all as *Sphaerospongia melliflua*).

**Cylindroporella arabica Elliott, 1957**

V.41627(1)-28(1) Slide. Syntypes of *Cylindroporella arabica* Elliott, 1957. Upper Jurassic. Al Hamiah, Coastal Wahidi, Hadhramaut, South Yemen. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1957a: 227; pl. 1, fig. 13 (V.41627(1)), fig. 14 (V.41628(1)).

V.41629(1-2) Slide. Syntypes of *Cylindroporella arabica* Elliott, 1957. Upper Jurassic. Well no. 28, Dukhan, Qatar. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1957a: 227; pl. 1, fig. 15 (V.41629(1)), fig. 16 (V.41629(2)). Figd Elliott, G. F. 1968b: 38; pl. 6, fig. 1 (V.41629(1)), fig. 2 (V.41629(2)).

V.52079(1-2) Slide. Lower Cretaceous, Barremian. Sarmord Formation. Sarmord, Sulemania Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 57,58; pl. 15, fig. 5 (V.52079(1)), fig. 7 (V.52079(2)) (all as *Munieria baconica*).

V.52080(1) Slide. Lower Cretaceous, Aptian/Albian. Qamchuqa Formation. Surdash, Sulemania Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 57,58; pl. 15, fig. 8 (as *Munieria baconica*).

**Coelosphaeridium sphaericum (Kjerulf, 1865)**

V.32406(1) Hand specimen. Upper Ordovician, Caradocian. Celli Grin, near Bala, Merioneth [Gwynedd], Wales. Ruddy, T. Colln. Presd 1915. Figd Spjeldnaes, N. 1955: 151-153, text-fig 1a.

**Coelosporella jonesii Wood, 1940**

V.26681(1-2) Slide. Syntypes of *Coelosporella jonesii* Wood, 1940. Lower Carboniferous, Viséan, D2. Carboniferous Limestone, Upper Grey Limestone. Fron-y-Cysyllte, near Llangollen, Denbigh [Clwyd], Wales. Jones, T. A. Colln. Presd Wood, A. 1940. Figd Wood, A. 1940: 16; pl. 2, fig. 3 (V.26681(1)), fig. 4 (V.26681(2)).

**Coelosporella wetheredii Wood, 1940**

V.26680(1) Slide. Holotype of *Coelosporella wetheredii* Wood, 1940. Lower Carboniferous, Viséan, D1. Carboniferous Limestone, "New Road Oolite", Bed no.3. Clifton, Gloucestershire [Avon], England. Wethered & Judd Colln. Presd Wood, A. 1940. Figd Wood, A. 1940: 16; pl. 2, figs 1,2.

**Cylindroporella cf. arabica Elliott, 1957**

V.57659(1), V.57661(2) See: *Sarfatiella dubari* Conrad & Peybernès, 1974

**Cylindroporella barnesi Johnson, 1954**

V.52051(1) Slide. Lower Cretaceous, Valanginian/Hauterivian. Garagu Formation. Well no. 2, Makhul, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 37; pl. 6, fig. 3.

V.52052(1) Slide. Lower Cretaceous, Aptian. Sarmord Formation. Sekhaniyan, Surdash, Sulemania Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 37; pl. 6, fig. 4.

**Cylindroporella sp.**

V.41732(1)-33(1) Slides. Lower Cretaceous, Hauterivian. Lower Qamchuqa Formation. Well no. 116, Kirkuk, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1961b: 82-84; pl. 11, fig. 2 (V.41733(1)), fig. 3 (V.41732(1)) (both as *Permocalculus ampullacea*).



**Cylindroporella sugdeni Elliott, 1957**

**V.41620(1)-24(1)** Slides. Syntypes of *Cylindroporella sugdeni* Elliott, 1957. Lower Cretaceous. Well no. 1, Fahud, Oman. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1957a: 227; pl. 1, fig. 1 (V.41620(1)), figs 2,3 (V.41621(1)), fig 4 (V.41622(1)), fig. 5 (V.41623(1)), fig. 6 (V.41624(1)). Figd Elliott, G. F. 1968b: 38; pl. 6, fig. 6 (V.41623(1)), fig. 7 (V.41620(1)).

**V.52053(1)** Slide. Lower Cretaceous. Well no. 1, Fahud, Oman. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 38; pl. 6, fig. 5.

**Cymopolia anadyomenea Elliott, 1959**

**V.41655(1), V.41656(1-2)** Slides. Paratypes of *Cymopolia anadyomenea* Elliott, 1959. Upper Cretaceous, Maastrichtian. Tanjero Formation. Diza North, Erbil Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1959: 218; pl. 1, fig. 2 (V.41655(1)), fig. 3 (V.41656(1)), fig. 4 (V.41656(2)). Figd Elliott, G. F. 1968b: 39,40; pl. 7, fig. 2 (V.41656(2)), fig. 3 (V.41656(1)), fig. 4 (V.41655(1)).

**V.41655(2)** Slide. Holotype of *Cymopolia anadyomenea* Elliott, 1959. Upper Cretaceous, Maastrichtian. Tanjero Formation. Diza North, Erbil Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1959: 218; pl. 1, fig. 1.

**V.41655(3), V.41660(1)** Slides. Upper Cretaceous, Maastrichtian. Tanjero Formation. Diza North, Erbil Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1959: 218; pl. 1, fig. 8 (V.41660(1)). Figd Elliott, G. F. 1968b: 39,40; pl. 7, fig. 4 (V.41655(3)).

**V.52054(1)-55(1)** Slides. Upper Cretaceous, Maastrichtian. Tanjero Formation. Diza North, Erbil Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 38,40; pl. 7, fig. 5 (V.52054(1)), pl. 8, fig. 1 (V.52055(1)).

**V.52056(1)** Slide. Upper Cretaceous, Maastrichtian. Aqra Formation. Aqra, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 39,40; pl. 8, fig. 5.

**Cymopolia barberae Elliott, 1968**

**V.52057(1)** Slide. Holotype of *Cymopolia barberae* Elliott, 1968. Lower Eocene. Kolosh Formation. Surdash, Sulemania Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 43,44; pl. 8, fig. 2.

**Cymopolia edwardsi L. & J. Morellet, 1939**

**V.24910(1)** Slide. Holotype of *Cymopolia edwardsi* L. & J. Morellet, 1939. Middle Eocene, Lutetian. Hauteville Beds. Hauteville [Hauteville-Bocage], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Carpenter, W. B. 1862: pl. 10, fig. 24 (as *Dactylopora cylindracea*). Figd Morellet, L. & Morellet, J. 1939: 33,34; pl. 5, fig. 1.

**Cymopolia elongata (Defrance, 1822)**

**V.52061(1)** Slide. Middle Eocene, Lutetian. Grignon, Paris, France. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 44; pl. 10, fig. 1.

**Cymopolia eochoristosporica Elliott, 1968**

**V.52652(1)** Slide. Holotype of *Cymopolia eochoristosporica* Elliott, 1968. Upper Cretaceous, Maastrichtian. Aruma Formation. Well no. 53, Murban, Abu Dhabi, Oman. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 40,41; pl. 9, figs 1,2.

**V.52653(1)** Slide. Paratype of *Cymopolia eochoristosporica* Elliott, 1968. Upper Cretaceous, Maastrichtian. Aruma Formation. Well no. 53, Murban, Abu Dhabi, Oman. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 40,41; pl. 9, fig. 3.

**Cymopolia kurdistanensis Elliott, 1955**

**V.41591(1)-92(1)** Slides. Syntypes of *Cymopolia kurdistanensis* Elliott, 1955. Palaeocene. Sinjar Formation. Banik, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955b: 127; pl. 1, fig. 13, (V.41591(1)), figs 14,15 (V.41592(1)). Figd Elliott, G. F. 1968b: 42,43; pl. 10, fig. 3 (V.41592(1), erroneously as V.41593).

**Cymopolia kurdistanensis Elliott, 1955**

V.52062(1) Slide. Palaeocene/Lower Eocene. Kolosh Formation. Bekhme, Erbil Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 42,43; pl. 10, fig. 2.

V.52063(1) Slide. Palaeocene. Kolosh Formation. Rowanduz, Erbil Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 42,43; pl. 10, fig. 4.

V.52064(1) Slide. Palaeocene. Jebel Faiyah, Oman. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 42,43; pl. 10, fig. 5.

**Cymopolia saipania Johnson, 1957**

V.53694a(1) Slide. Lower? Miocene. East of Batu Gading, Sarawak. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Johnson, J. H. 1962: 166; pl. 1, fig. 5.

V.53696a(1) Slide. Lower? Miocene. West of Batu Gading, Sarawak. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Johnson, J. H. 1962: 166; pl. 2, fig. 5.

**Cymopolia sp.**

V.24912(2) Slide. Middle Eocene, Lutetian. Hauteville Beds. Hauteville [Hauteville-Bocage], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Morellet, L. & Morellet, J. 1939: 34; pl. 5, fig. 5.

V.52065(1) Slide. Palaeocene/Lower Eocene. Sinjar Formation. Pila Spi, Sulemania Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 44,45; pl. 10, fig. 6.

**cf. Cymopolia sp.**

V.24910(2) Slide. Middle Eocene, Lutetian. Hauteville Beds. Hauteville, [Hauteville-Bocage], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Carpenter, W. B. 1862: pl. 10, fig. 23 (as *Dactylopora cylindracea*). Ref. Morellet, L. & Morellet, J. 1939: 38,39.

**Cymopolia tibetica Morellet, 1916**

V.52059(1) Slide. Upper Cretaceous, Maastrichtian. Aqra-Hadiena Formation. Aqra, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 41,42; pl. 8, fig. 3.

V.52060(1) Slide. Upper Cretaceous, Maastrichtian. Hadiena Formation. Chalki Islam, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 41,42; pl. 8, fig. 4.

**Dactylopora annulus Parker & Jones, 1860**

V.24925(1) See: *Neomeris alternans* L. & J. Morellet, 1939

**Dactylopora clypeina Carpenter, 1862**

V.24920(1-3) See: *Clypeina pezanti* L. & J. Morellet, 1922

**Dactylopora cylindracea Lamarck, 1816**

V.24910(1) See: *Cymopolia edwardsi* L. & J. Morellet, 1939

V.24910(2) See: cf. *Cymopolia* sp.

**Dactylopora digitata Parker & Jones, 1860**

V.24920(1-3) See: *Clypeina pezanti* L. & J. Morellet, 1922

**Dactylopora eruca Parker & Jones, 1860**

V.24925(2-4) See: *Neomeris alternans* L. & J. Morellet, 1939

**Dactylopora glandulosa Parker & Jones, 1860**

V.24921(1-2) See: *Neomeris* sp.

V.24921(3-4) See: *Neomeris* sp.1 of L. & J. Morellet, 1939

V.24921(5-7) See: *Neomeris* sp.2 of L. & J. Morellet, 1939

**Dactylopora reticulata Parker & Jones, 1860, non DeFrance, 1822**

V.24912(1) See: cf. *Neomeris* sp.

V.24919(1-2) See: *Larvaria encrinula* DeFrance, 1822

***Dasycladophycus ensomi* Elliott, 1982**

V.60786(1) Hand specimen.  
**Holotype** of *Dasycladophycus ensomi* Elliott, 1982. Lower Carboniferous, Holkerian. Clifton Down Limestone. New Frome Quarry, Whatley, Somerset, England. Colln. Ensom, P. C. Presd 1981. Figd Elliott, G. F. 1982b: 105, 106, text-fig. 1.

***Dasyporella cf. norvegica* Høeg, 1932**

V.17067(1) Slide. Upper Ordovician, Caradocian. Lower Ardmillan Group, Craighead Limestone. Craighead, Girvan, Ayrshire, Scotland. Hinde, G. J. Colln. Presd 1918. Figd Elliott, G. F. 1972c: 362; pl. 2, fig. 1.

V.55325a(1) Slide. Upper Ordovician, Caradocian. Lower Ardmillan Group, Craighead Limestone. Craighead, Girvan, Ayrshire, Scotland. Garwood, E. J. Colln. Presd 1950. Figd Elliott, G. F. 1972c: 362; pl. 2, fig. 2. Slide prepared from hand specimen V.55325.

***Dermatolithon saipanense* Johnson, 1957**

V.53091(1) Slide. Lower Miocene. Lailuk, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964b: 484; pl. 3, fig. 7 (misprinted as fig. 1).

***Dimorphosiphon rectangulare* Høeg, 1927**

V.23778(1) Slide. Middle Ordovician. Helgøen, Lake Mjøsen, Norway. Presd Høeg, O. A. 1934. Figd Elliott, G. F. 1972c: 358; pl. 1, fig. 1.

V.42601(1) Slide. Middle Ordovician. Helgøen, Lake Mjøsen, Norway. Colln. Høeg, O. A. 1934. Exchange 1960. Figd Elliott, G. F. 1972c: 358; pl. 1, fig. 2.

V.55325a(2-3) Slide. Upper Ordovician, Caradocian. Lower Ardmillan Group, Craighead Limestone. Craighead, Girvan, Ayrshire, Scotland. Garwood, E. J. Colln. Presd 1950. Figd Elliott, G. F. 1972c: 358; pl. 2, fig. 4 (V.55325a(2)), fig. 5 (V.55325a(3)). Slide prepared from hand specimen V.55325.

***Diplopora annulatissima* Pia, 1920**

V.53665(1) Slide. Middle Triassic, Upper Muschelkalk. Piculei Rocks, Grödener Valley [Gardena Valley], South Tirol [Dolomites], Italy. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Ogilvie-Gordon, M. M. 1927: 74; pl. 10, fig. 9.

V.53666(1) Slide. Middle Triassic, Anisian/Ladinian junction. N slope of Langköfel [Sasso Lungo], South Tirol [Dolomites], Italy. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Ogilvie-Gordon, M. M. 1927: 74; pl. 10, fig. 7b.

V.53667(1) Slide. Middle Triassic. Dolomitic Limestone. Langköfel [Sasso Lungo], South Tirol [Dolomites], Italy. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Ogilvie-Gordon, M. M. 1927: 74; pl. 10, fig. 8.

V.53669(1), V.53672(1) Slides. Middle Triassic, Aninian/Ladisian junction. Cernadoi, Alba, Fassa Valley, South Tirol [Dolomites], Italy. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Ogilvie-Gordon, M. M. 1927: 74; pl. 10, fig. 10 (V.53669(1)), fig. 12 (V.53672(1)).

V.53671(1) Slide. Middle Triassic, *Trinodosus* Zone. Sasso Lungo, Dolomites, Italy. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Ogilvie-Gordon, M. M. 1927: 74; pl. 10, fig. 7a.

***Dissocladella deserta* Elliott, 1968**

V.52066(1)-67(1) Slides. Syntypes of *Dissocladella deserta* Elliott, 1968. Palaeocene/Lower Eocene. Umm er Rudhama Formation. Aidah and Wagsa, Diwanayah Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 46; pl. 10, fig. 7 (V.52066(1)), fig. 8 (V.52067(1)).

***Dissocladella savitriae* Pia, 1936**

V.41580(1) Slide. Palaeocene. Sinjar Formation. Banik, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955b: 128; pl. 1, fig. 2. Figd Elliott, G. F. 1968b: 47, 48; pl. 11, fig. 1.



**Dissocladella savitriae Pia, 1936**

V.52068(1) Slide. Palaeocene. Kolosh Formation. Rowanduz, Erbil Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 47,48; pl. 11, fig. 2.

V.52069(1) Slide. Lower Eocene. Well no. 3, Dukhan, Qatar. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 47,48; pl. 11, fig. 3.

**Dissocladella undulata (Raineri, 1922)**

V.52070(1), V.52071(1-2) Slides. Upper Cretaceous, Turonian. Sadr Formation. Well no. 1, Musaiyib, Hilla Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 46,47; pl. 11, fig. 4 (V.52070(1)), fig. 5 (V.52071(1)), fig. 6 (V.52071(2)).

**Distichoplax biserialis (Dietrich, 1927)**

V.41602(1) Slide. Palaeocene. Near Sulemania Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1956b: 332; pl. 2, fig. 1.

V.41665(1) Slide. Palaeocene. Wady Dhank, Dut, Oman. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1960: 225; pl. 8, fig. 3.

V.55583(1) Slide. Palaeocene. Jebel Tanamir, Fatah, Oman. Presd Elliott, G. F. & Iraq Petroleum Co. 1958. Figd Elliott, G. F. 1960: 225; pl. 8, fig. 2.

**Dobunniella coriniensis Elliott, 1975**

V.57652(1)-55(1), V.57658(1) Hand specimen V.57658, Slides V.57652-55. Syntypes of *Dobunniella coriniensis* Elliott, 1975. Middle Jurassic, Bathonian. Great Oolite, Upper White Limestone. Daglingworth, Cirencester, Gloucestershire, England. Colld Elliott, G. F. Presd 1974. Figd Elliott, G. F. 1975a: 360-361; pl. 48, fig. 4 (V.57652(1)), fig. 5 (V.57653(1)), pl. 49, fig. 1 (V.57654(1)), fig. 2 (V.57655(1)), pl. 50, fig. 1 (V.57658(1)).

**Dobunniella coriniensis Elliott, 1975**

V.62296(1) Slide. Middle Jurassic, basal Upper Bathonian, *Hodsoni* Zone. Great Oolite, Upper White Limestone. Fowler's Hill, Quenington, Gloucestershire, England. Colld Elliott, G. F. Presd 1985. Figd Elliott, G. F. 1986a: fig. 3.

**Eoclypeina sp.**

V.41598(1) See: *Clypeina?* sp.

V.52048(1) See: *Clypeina?* sp.

**Epimastopora malaysiana Elliott, 1968**

V.53442 Hand specimen. Holotype of *Epimastopora malaysiana* Elliott, 1968. Middle Permian. H. S. Lee Mine no. 8, Kampar, Perak, Malaya. Elliott, G. F. Colln. Presd 1967. Figd Elliott, G. F. 1968a: 491; pl. 93, figs 3,4.

**Epimastopora minima Elliott, 1956**

V.41596(1), V.41698(1) See: *Tauridium* sp.

**Epiphyton fasciculatum Chapman, 1916**

V.59487(1)-88(1) Slides. Cambrian. Weddell Sea, Antarctica. Colld Scottish National Antarctic Expedition 1902-4. Gordon, W. T. Colln. Presd Wood, A. 1977. Figd Gordon, W. T. 1920: 684,685; pl. 1, figs 4,4a (V.59487(1)), fig. 16 (V.59488(1)).

**Ethelia alba (Pfender, 1937)**

V.44844(1) Slide. Palaeocene. Sinjar Formation. Sarmord, Sulemania Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1962. Figd Elliott, G. F. 1963a: 293,294; pl. 47, fig. 3.

V.44845(2) Slide. Palaeocene. Kolosh Formation. Rowanduz, Erbil Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1962. Figd Elliott, G. F. 1963a: 293,294; pl. 47, figs 1,2.

**Euspondylporella sp.**

V.11063a(1)-63b(1) Slides. Lower Cretaceous. Akhveran, Bayburt, Turkey. Colld Oswald, F. & Lynch, W. N. B. 1898. Presd 1904. Figd Oswald, F. 1906: 235,236; pl. opposite page 234, fig. 2 (V.11063a(1) as *Muniera sp.*). Figd Elliott, G. F. 1981: 125, fig. 1 (V.11063a(1)), fig. 2 (V.11063b(1)). Slides prepared from hand specimen V.11063.

**Exvotarisella maponi Elliott, 1970**

V.55391(1), V.55394(1), 95(1-2), 96(1-2), 97(1)-98(1) Slides. Lower Carboniferous, Viséan, D2. Upper Liddesdale Group, Oxford Limestone, Bean Bed. Wisplaw, Alnwick, Northumberland, England. Garwood, E. J. Colln. Presd 1950. Figd Elliott, G. F. 1970c: 446; pl. 82, fig. 1 (V.55398(1)), fig. 4 (V.55391(1)), fig. 5 (V.55396(1)), pl. 83, fig. 1 (V.55395(1)), fig. 2 (V.55395(2)), fig. 3 (V.55396(2)), fig. 4 (V.55394(1)), fig. 5 (V.55397(1)).

V.55393(1) Slide. Holotype of *Exvotarisella maponi* Elliott, 1970. Lower Carboniferous, Viséan, D2. Upper Liddesdale Group, Oxford Limestone, Bean Bed. Wisplaw, Alnwick, Northumberland, England. Garwood, E. J. Colln. Presd 1950. Figd Elliott, G. F. 1970c: 446; pl.84, fig. 2.

V.55399(1) Slide. Paratype of *Exvotarisella maponi* Elliott, 1970. Lower Carboniferous, Viséan, D2. Upper Liddesdale Group, Oxford Limestone, Bean Bed. Wisplaw, Alnwick, Northumberland, England. Garwood, E. J. Colln. Presd 1950. Figd Elliott, G. F. 1970c: 446; pl. 82, fig. 3.

**Fucoides dichotomus Morris, 1840**

V.20199(1) Hand specimen. Holotype of *Fucoides dichotomus* Morris, 1840. Jurassic. South of Charwar Range, Cutch, India. Grant, C. W. Colln. Presd Geological Society 1911. Figd Morris, J. 1840: plate description and pl. 21, fig. 7.

**Furcoporella diplopora Pia, 1918**

V.41606(1-4) Slide. Palaeocene. Kolosh Formation. Sedelan, Sulemania Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1956b: 332; pl. 2, fig. 5 (V.41606(1)), fig. 6 (V.41606(2)). Figd Elliott, G. F. 1968b: 49,50; pl. 11, fig. 7 (V.41606(3)), fig. 8 (V.41606(4)), fig. 9 (V.41606(1) erroneously as V.51232).

**Galaxaura sp.**

V.41635(1) Slide. Recent. West Indies. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1958a: pl. 46, fig. 2.

**Girvanella ducii Wethered, 1890**

V.44935(1) Slide. Lower Carboniferous, Viséan, base of D2. Carboniferous Limestone, Great Scar Limestone, Girvanella Nodular Band. Hull Pot, Pen-y-Ghent, Yorkshire, England. Garwood, E. J. Colln. Presd 1950. Figd Wood, A. 1963: 269; pl. 40, fig. 2.

**Girvanella nicholsoni (Wethered, 1886)**

V.45237(1) (ex. P.4482) Slide. Lower Carboniferous, K. Carboniferous Limestone, Lower Limestone Shales. Quarry, east of deep cutting, west side of Wigpool syncline, near Drybrook, Gloucestershire, England. Presd Wethered, E. Figd Wood, A. 1941: 219,220; pl. 13, fig. 1.

**Girvanella problematica Nicholson & Etheridge, 1878**

V.55303a(1) Slide. Lower Ordovician, Llandeilian. Barr Group, Stinchar Limestone. Tramitchell Quarry [Tormitchell], Girvan, Ayrshire, Scotland. Garwood, E. J. Colln. Presd 1950. Figd Seward, A. C. 1931: 105, text-fig. 41c.

V.34566(1) Slide. Neotype of *Girvanella problematica* Nicholson & Etheridge, 1878. Lower Ordovician, Llandeilian. Barr Group, Stinchar Limestone. Tormitchell Quarry, Girvan, Ayrshire, Scotland. Presd Wood, A. 1960. Figd Wood, A. 1957: 26,27; pl. 5, fig. 2. Figd Danielli, H. M. C. 1981: 94,96; fig. 5a-e.

**Girvanella problematica Nicholson & Etheridge, 1878**

V.15965(1) Slide. Lower Ordovician, Llandeilian. Barr Group, Stinchar Limestone. Craighead, Girvan, Ayrshire, Scotland. Hinde, G. J. Colln. Presd 1918. Figd Danielli, H. M. C. 1981: 94,96; fig. 3a(erroneously as V.15956),d.

V.59545(1)-46(1), V.59548(1), V.59455(1), V.59463(1)-64(1) Slides. Lower Ordovician, Llandeilian. Barr Group, Stinchar Limestone. Benan Burn, Barr, Girvan, Ayrshire, Scotland. Presd Wood, A. 1977. Figd Wood, A. 1957: 26-27; pl. 5, fig. 4 (V.59563(1)), fig. 5 (V.59555(1)), pl. 6, fig. 1 (V.59545(1)), fig. 2 (V.59546(1)), fig. 3 (V.59548(1)), fig. 4 (V.59564(1)).

**Girvanella problematica var. spiralis Lewis, 1942**

V.26830(1) Slide. Lower Ordovician. Shumardia Limestone. Lévis, Quebec, Canada. Presd Lewis, H. P. 1941. Figd Lewis, H. P. 1942: 50; pl. 1, figs 1-6.

V.26831(1) Slide. Holotype of *Girvanella problematica* var. *spiralis* Lewis, 1942. Lower Ordovician. Shumardia Limestone. Lévis, Quebec, Canada. Presd Lewis, H. P. 1941. Figd Lewis, H. P. 1942: 50; pl. 1, figs 7,8.

**Girvanella sp.**

V.43736(1) Slide. Lower Carboniferous, Viséan, base of D2. Carboniferous Limestone, Great Scar Limestone, Girvanella Nodular Band. Hull Pot, Pen-y-Ghent, Yorkshire, England. Garwood, E. J. Colln. Presd 1950. Figd Garwood, E. J. & Goodyear, E. 1924: 200; pl. 19, fig. 1.

V.60469(1)-72(1) Slides. Lower Ordovician, Llandeilian. Barr Group, Stinchar Limestone. Aldons Quarry, south of Girvan, Ayrshire, Scotland. Presd Danielli, H. M. C. 1980. Figd Danielli, H. M. C. 1981: 94,96; fig. 2a (V.60469(1)), fig. 3b (V.60470(1)), fig. 3c (V.60471(1)), fig. 3e (V.60472(1)).

**Girvanella sp.**

V.60473(1) SEM stub. Lower Ordovician, Llandeilian. Barr Group, Stinchar Limestone. Aldons Quarry, south of Girvan, Ayrshire, Scotland. Presd Danielli, H. M. C. 1980. Figd Danielli, H. M. C. 1981: 94,96; fig. 2b-d.

**Girvanella staminea Garwood, 1931**

V.54224(1) (ex. V.43735) Slide. Holotype of *Girvanella staminea* Garwood, 1931. Lower Carboniferous, Tournaisian, C1. Lower Border Group, Main Algal Beds, "Main Reef". White Beck, Bewcastle, Cumberland [Cumbria], England. Garwood, E. J. Colln. Presd 1950. Figd Garwood, E. J. 1931: 139; pl. 13, fig. 1. Figd Wood, A. 1963: 268; pl. 38, fig. 2.

V.54225(1) Slide. Lower Carboniferous, Viséan, C2,? Lower Border Group, Cambeck Beds. Cambeck, Spadeadam, Cumberland [Cumbria], England. Garwood, E. J. Colln. Presd 1950. Figd Wood, A. 1963: 268; pl. 39, fig. 2.

**Goniola geometrica Buvignier, 1852**

V.11396 Hand specimen. Upper Jurassic, Oxfordian. Passage Beds. Near Poitiers, France. Presd Walsch, J. 1908. Figd Saporta, Marquis de 1891: 219; pl. 30. Plaster cast. Original in Museum of Poitiers University.

**Griphoporella arabica Pfender, 1938**

V.52033(2-3) See: *Ovulites mailloleensis* Massieux, 1966

**Griphoporella cf. perforatissima Carozzi, 1955**

V.52073(1) Slide. Upper Jurassic. Najmah Formation. Well no. 117, Kirkuk, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 50,51; pl. 12, fig. 4.



**Gymnocodium bellerophontis** (Rothpletz, 1894)

V.41576(1)-78(1) Slides. Upper Permian. Ora, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955a: 85; pl. 1, fig. 3 (V.41577(1)), fig. 5 (V.41576(1)), figs 6,7 (V.41578(1)).

V.41575(1) Slide. Upper Permian. Harur, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955a: 85; pl. 1, fig. 4.

**Gyrogona wrighti** (Salter ex Reid & Groves, 1921)

V.18328(1) Slide. Upper Eocene, Priabonian. Bembridge Limestone. Saltmead Ledge, near Elmsworth, Isle of Wight, England. Colld Colenutt, G. W. & Groves, J. 1919. Groves, J. Colln. Presd 1926. Figd Groves, J. 1926: 167-169, text-fig. 16? (as *Chara medicaginula*). Probably one of the 21 gyrogonites in this cell-mount.

V.18329(1-10) Slide. Upper Eocene, Priabonian. Osborne Beds. Kings Quay, Isle of Wight, England. Colld Colenutt, G. W. 1921. Groves, J. Colln. Presd 1926. Figd Groves, J. 1926: 167-168; pl. 12, fig. 4 (V.18329(5)?,(6)?,(3)?) (as *Chara medicaginula*). Gyrogonites.

**Gyrogona wrighti?** (Salter ex Reid & Groves, 1921)

V.2551(1) Slide. Palaeocene/Eocene. Intertrappean Series? Sichel Hills, India. Purchd Hall, H. B. 1887. Figd Sahni, B. & Rao, H. S. 1943: 43; pl. 2, fig. 6 (as *Gyrogonites medicaginula?*). Gyrogonites.

**Gyrogonites medicaginula?** Lamarck, 1804

V.2551(1) See: *Gyrogona wrighti?* (Salter ex Reid & Groves, 1921)

**Halimeda nana** Pia, 1932

V.41581(1) Slide. Palaeocene. Banik, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955b: 129; pl. 1, fig. 3.

**Halimeda praemonilis** L. & J. Morellet, 1941

V.41613(1)-15(1) Slides. Palaeocene. Sinjar Formation. Rowanduz, Erbil Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1957c: 793-4; pl. 25, fig. 1,2 (V.41613(1)), fig. 3 (V.41614(1)), fig. 4 (V.41615(1)). Figd Elliott, G. F. 1965b: pl. 23, fig. 2 (V.41615(1)).

**Halimeda** sp.

V.51380(1) Slide. Upper Cretaceous. Tanjero Formation. Balambo, Sulemania Liwa, Iraq. Presd Elliott, G. F. 1964. Figd Elliott, G. F. 1965b: 200; pl. 23, fig. 5.

**Hamulusella sedalanensis** Elliott, 1978

V.32492(1), V.41606(1) Slides. Syntypes of *Hamulusella sedalanensis* Elliott, 1978. Palaeocene/Lower Eocene. Kolosh Formation. Sedalan, Sulaimaniya [Sulemania Liwa], Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1956 (V.32492) 1960 (V.41606). Figd Elliott, G. F. 1978: 687; pl. 73, figs 1,3,4 (V.41606(1)), fig. 2 (V.32492(1)).

**Harlanjohnsonella annulata** Elliott, 1968

V.53441(1-2), V.53443(1) Slides. Syntypes of *Harlanjohnsonella annulata* Elliott, 1968. Upper Cretaceous. Fetrebovo, Dlaglica, SE of the Zlatibor massif, SW Serbia, Yugoslavia. Elliott, G. F. Colln. Presd 1967. Figd Elliott, G. F. 1968a: 494; pl. 93, fig. 1 (V.53441(1)), fig. 2 (V.53441(2)), pl. 94, fig. 1 (V.53443(1)).

V.53444(1) Slide. Upper Cretaceous. Fetrebovo, Dlaglica, SE of the Zlatibor massif, SW Serbia, Yugoslavia. Elliott, G. F. Colln. Presd 1967. Figd Elliott, G. F. 1968a: 494; pl. 94, fig. 2.

**Harrisichara tuberculata** (Lyell, 1826)

V.18320(1-23) Slide. Lower Oligocene, Rupelian. Bembridge Marls. Gurnard Bay, Cowes, Isle of Wight, England. A'Court-Smith, J. E. E. Colln. Purchd Wooley, R. W. 1924. Figd Groves, J. 1926: 170,171, text-fig. 17 (specific gyrogonite could not be determined), pl. 12, fig. 1 (V.18320,(12)?,(8)?) (as *Chara tuberculata*). Gyrogonites.

**Hensonella cylindrica Elliott, 1960**

Z.902(1-12) See: *Salpingoporella dinarica* Radoicic, 1959

**Hydrolithon iranicum (Elliott, 1970)**

V.53645 Hand specimen. **Holotype** of *Pseudaethesolithon iranicum* Elliott, 1970. Lower/Middle Miocene. Mishan Formation. Tang-i-Dashtak, Fars Province, Iran. Elliott, G. F. Colln. Presd 1970. Figd Elliott, G. F. 1970d: 32, text-figs 1,2 (as *Pseudaethesolithon iranicum*).

V.53646-49 Slides. **Paratypes** of *Pseudaethesolithon iranicum* Elliott, 1970. Lower/Middle Miocene. Mishan Formation. Tang-i-Dashtak, Fars Province, Iran. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1970d: 32; pl. 1, figs 1-3, pl. 2, fig. 1, pl. 3, fig. 6, pl. 4, figs 3,5 (V.53646), pl. 2, fig. 2, pl. 4, figs 1,2 (V.53647), pl. 2, figs 3,4, pl. 3, fig. 5, pl. 4, fig. 4 (V.53648), pl. 3, figs 1-4, pl. 4, fig. 6 (V.53649) (all as *Pseudaethesolithon iranicum*).

**Hypocaustella cartimanduae Elliott, 1980**

V.21205b(1)-05d(1) Slides. **Paratypes** of *Hypocaustella cartimanduae* Elliott, 1980. Lower Carboniferous, Viséan, D1. Carboniferous Limestone, Great Scar Limestone. Mealbank Quarry, Ingleton, North Yorkshire, England. Presd Lewis, H. P. 1930. Figd Elliott, G. F. 1980: 73,74, fig. 1 (V.21205c(1)), fig. 2 (V.21205b(1)), fig. 3 (V.21205d(1)). Slides prepared from hand specimen V.21205.

V.21205a(1), 05e(1), 05f(1) Slides. Lower Carboniferous, Viséan, D1. Carboniferous Limestone, Great Scar Limestone. Mealbank Quarry, Ingleton, North Yorkshire, England. Presd Lewis, H. P. 1930. Figd Elliott, G. F. 1980: 73,74, fig. 4 (V.21205e(1)), fig. 5 (V.21205a(1)), fig. 6 (V.21205f(1)). Slides prepared from hand specimen V.21205.

V.21205d(1) Slide. **Holotype** of *Hypocaustella cartimanduae* Elliott, 1980. Lower Carboniferous, Viséan, D1. Carboniferous Limestone, Great Scar Limestone. Mealbank Quarry, Ingleton, North Yorkshire, England. Presd Lewis, H. P. 1930. Figd Elliott, G. F. 1980: 73,74, fig. 7. Slide prepared from hand specimen V.21205.

**Imperiella iranica Elliott, 1975**

V.57669(1-2), V.57670(1)-71(1) Slides. **Syntypes** of *Imperiella iranica* Elliott, 1975. Upper Permian. Ruteh Limestone, sub-division C. About 3km south of Emarat, Lower Heraz Valley, Elburz, Iran. Colld Süssli, P. Presd 1974. Figd Elliott, G. F. 1975b: 452-54; pl. 1, fig. 1 (V.57669(1)), fig. 2 (V.57671(1)), fig. 3 (V.57669(2)).

**Indoporella satyavanti Pia, 1936**

V.52072(1) Slide. Palaeocene/Lower Eocene. Sinjar Formation. Banik, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 52,53; pl. 12, fig. 2.

**Inopinatella lawsoni Elliott, 1971**

V.31256(1), V.31262(1)-63(1), V.31278(1) Hand specimens. **Paratypes** of *Inopinatella lawsoni* Elliott, 1971. Upper Silurian. Upper Bringewood Beds. Aymestry, Shropshire, England. Colld Lawson, J. D. Presd 1953. Figd Elliott, G. F. 1971a: 635; pl. 120, fig. 3 (V.31263(1)), pl. 121, fig. 1 (V.31278(1)), fig. 2 (V.31262(1)), fig. 3 (V.31256(1)).

V.31268(1) Hand specimen. **Holotype** of *Inopinatella lawsoni* Elliott, 1971. Upper Silurian. Upper Bringewood Beds. Aymestry, Shropshire, England. Colld Lawson, J. D. Presd 1953. Figd Elliott, G. F. 1971a: 635; pl. 120, figs 1,2.

**Intermurella scotica Elliott, 1972**

V.55302a(1) Slide. **Holotype** of *Intermurella scotica* Elliott, 1972. Upper Ordovician, Caradocian. Lower Ardmillan Group, Craighead Limestone. Craighead, Girvan, Ayrshire, Scotland. Garwood, E. J. Colln. Presd 1950. Figd Elliott, G. F. 1972c: 361; pl. 4, fig. 1. Slide prepared from hand specimen V.55302.

V.55302a(2) Slide. Upper Ordovician, Caradocian. Lower Ardmillan Group, Craighead Limestone. Craighead, Girvan, Ayrshire, Scotland. Garwood, E. J. Colln. Presd 1950. Figd Elliott, G. F. 1972c: 361; pl. 3, fig. 3. Slide prepared from hand specimen V.55302.



**Intermurella scotica Elliott, 1972**

V.55302b(1), V.55302c(2) Slides.  
Paratypes of *Intermurella scotica* Elliott, 1972. Upper Ordovician, Caradocian. Lower Ardmillan Group, Craighead Limestone. Craighead, Girvan, Ayrshire, Scotland. Garwood, E. J. Colln. Presd 1950. Figd Elliott, G. F. 1972c: 361; pl. 4, fig. 2 (V.55302c(2)), fig. 3, (V.55302b(1)). Slide prepared from hand specimen V.55302.

V.55302c(1) Slide. Upper Ordovician, Caradocian. Lower Ardmillan Group, Craighead Limestone. Craighead, Girvan, Ayrshire, Scotland. Garwood, E. J. Colln. Presd 1950. Figd Elliott, G. F. 1972c: 361; pl. 4, fig. 4. Slide prepared from hand specimen V.55302.

**Jania cf. menguadi Lemoine, 1934**

V.53075(1) Slide. Palaeocene. Galwara, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964a: 210; pl. 3, fig. 3.

**Jania sp.**

V.53698(1) Slide. Eocene. West of Batu Gading, Sarawak. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Johnson, J. H. 1962: 165; pl. 5, fig. 5.

V.53709(1) Slide. Miocene. Bukit Betok, Sarawak. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Johnson, J. H. 1962: 165; pl. 4, fig. 7.

**Kidstoniella fritschi Croft & George, 1959**

V.32409(2) Slide. Holotype of *Kidstoniella fritschi* Croft & George, 1959. Lower Devonian, Siegenian. Rhynie Chert. Muir of Rhynie, Aberdeenshire, Scotland. Scourfield, D. J. Colln. Bequest 1956. Figd Croft, W. N. & George, E. A. 1959: 348-350; pl. 41, figs 2,9, pl. 44, figs 25-29.

**Koninckopora inflata (de Koninck, 1842)**

V.23551(1) Slide. Lower Carboniferous, Viséan. Carboniferous Limestone. Tray Cliff, Castleton, Derbyshire, England. Colld Waterhouse, J. L. Presd 1934. Figd Wood, A. 1943: 212; pl. 10, fig. 1. Figd Wright, V. P. 1981: 187, text-fig. 2.

**Koninckopora tenuiramosa Wood, 1943**

V.26783(1), 83a(1) (ex. D.29159) Hand specimen V.26783, Slide V.26783a.  
Holotype of *Koninckopora tenuiramosa* Wood, 1943. Lower Carboniferous. Carboniferous Limestone. Cork, Co. Cork, Republic of Ireland. Wright, J. Colln. Presd 1915. Figd Wood, A. 1943: 219; pl. 10, fig. 2 (V.26783a(1)), fig. 3 (V.26783(1)).

**Lacryomorphus perplexus Elliott, 1958**

V.41654(1) Slide. Holotype of *Lacryomorphus perplexus* Elliott, 1958. Upper Triassic. Ora, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1958b: 424; pl. 3, fig. 10.

**Lagynophora sp.**

V.17155(1) Hand specimen. Eocene, Liburnian. Cosina-sehieten, Lagynophora Kalk. Monte Spaccato, Trieste, Yugoslavia. Colld Slache, G. Presd Geol. Slaaks-Museum, Vienna 1923. Figd Croft, W. N. 1952: 203; pl. 19, figs 29,30. Oospore.

**Langiella scourfieldi Croft & George, 1959**

V.32409(1) Slide. Holotype of *Langiella scourfieldi* Croft & George, 1959. Lower Devonian, Siegenian. Rhynie Chert. Muir of Rhynie, Aberdeenshire, Scotland. Scourfield, D. J. Colln. Bequest 1956. Figd Croft, W. N. & George, E. A. 1959: 343-347; pl. 41, figs 1,3-8,10, pl. 42, figs 12-16, pl. 43, figs 17,19-24.

**Larvaria davisii L. & J. Morellet, 1939**

V.24857(1) Slide. Middle Eocene, Lutetian. Bracklesham Group, Selsey Formation, Bed Fisher xvii. Whitecliff Bay, Isle of Wight, England. Davis, A. G. Colln. Presd Trustees of the Godman Fund 1934. Figd Morellet, L. & Morellet, J. 1939: 45,46; pl. 5, fig. 16.

V.24873(1) Slide. Holotype of *Larvaria davisii* L. & J. Morellet, 1939. Middle Eocene, Lutetian. Bracklesham Group, Selsey Formation, Bed Fisher 22b. Medmerry Farm, Selsey, Sussex, England. Davis, A. G. Colln. Presd Trustees of the Godman Fund 1934. Figd Morellet, L. & Morellet, J. 1939: 45,46; pl. 5, fig. 13.



**Larvaria davisi L. & J. Morellet, 1939**

**V.62287-88** (ex. V.24873) Slides. Middle Eocene, Lutetian. Bracklesham Group, Selsey Formation, Bed Fisher 22b. Medmerry Farm, Selsey, Sussex, England. Davis, A. G. Colln. Presd Trustees of the Godman Fund 1934. Figd Morellet, L. & Morellet, J. 1939: 45,46; pl. 5, fig. 11 (V.62288 as V.24873), fig. 12 (V.62289 as V.24873).

**Larvaria encrinula Defrance, 1822**

**V.24906(1-4), V.24907(2-5)** Slides. Middle Eocene, Lutetian. Hauteville Beds. Hauteville [Hautteville-Bocage], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Morellet, L. & Morellet, J. 1939: 30-33; pl. 4, fig. 13 (V.24906(1)), fig. 14, (V.24907(3)), fig. 15 (V.24907(2)), fig. 16 (V.24906(2)), fig. 17 (V.24907(4)), fig. 18 (V.24907(5)), fig. 19 (V.24906(4)), fig. 20 (V.24906(3)).

**V.24919(1-2)** Slide. Middle Eocene, Lutetian. Hauteville Beds. Hauteville [Hautteville-Bocage], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Carpenter, W. B. 1862: pl. 10, fig. 17 (V.24919(1)), figs 18,19 (V.24919(2)) (all as *Dactylopora reticulata*). Figd Morellet, L. & Morellet, J. 1939: 30-33; pl. 4, fig. 7 (V.24919(2)), fig. 8 (V.24919(1)).

**Larvaria limbata Defrance, 1822**

**V.24907(1)** Slide. Middle Eocene, Lutetian. Hauteville Beds. Hauteville [Hautteville-Bocage], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Morellet, L. & Morellet, J. 1939: pl. 4, fig. 21.

**Leckhamptonella llewellyae Elliott, 1982**

**V.60703(1)** Slide. Holotype of *Leckhamptonella llewellyae* Elliott, 1982. Middle Jurassic, Aalenian, *Bradfordensis* subzone. Lower Inferior Oolite, Upper Freestone facies of Scotsquar Hill Limestone. Leckhampton, Cheltenham, Gloucestershire, England. Colld Elliott, G. F. Presd 1982. Figd Elliott, G. F. 1982a: 432; pl. 45, fig. 1.

**Leckhamptonella llewellyae Elliott, 1982**

**V.60704(1)-08(1)** Slides. Paratypes of *Leckhamptonella llewellyae* Elliott, 1982. Middle Jurassic, Aalenian, *Bradfordensis* subzone. Lower Inferior Oolite, Upper Freestone facies of Scotsquar Hill Limestone. Leckhampton, Cheltenham, Gloucestershire, England. Colld Elliott, G. F. Presd 1966. Figd Elliott, G. F. 1982a: 432; pl. 45, fig. 2 (V.60704(1)), fig. 3 (V.60705(1)), fig. 4 (V.60706(1)), fig. 5 (V.60707(1)), fig. 6 (V.60708(1)).

**Lithocodium aggregatum Elliott, 1956**

**V.41597(1), V.41599(1)** Slides. Paratypes of *Lithocodium aggregatum* Elliott, 1956. Lower Cretaceous. Well no. 4, Rumalia, Basra Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1956b: 331; pl. 1, fig. 2 (V.41597(1)), fig. 4 (V.41599(1)).

**V.41600(1)** Slide. Holotype of *Lithocodium aggregatum* Elliott, 1956. Lower Cretaceous. Well no. 4, Rumalia, Basra Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1956b: 331; pl. 1, fig. 5.

**V.41616(1)** Slide. Lower Cretaceous. Well no. 4, Rumalia, Bossorah Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1957c: 792; pl. 25, fig. 5.

**Lithophyllum albanense Lemoine, 1924**

**V.60928a(1)** Slide. Miocene. Upper Coralline Limestone Formation. Ghaju, Zuvber, Malta. Colld Bosence, D. W. J. Presd 1982. Figd Bosence, D. W. J. 1983: 160; pl. 17, figs 1-3. Slide prepared from hand specimen V.60928.

**Lithophyllum albanense? Lemoine, 1924**

**V.53093(1)** Slide. Lower Miocene. Lailuk, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964b: 482; pl. 3, fig. 6 (misprinted as fig. 2).

**Lithophyllum bahrijense Bosence, 1983**

**V.60929-29a** Hand specimen V.60929, Slide V.60929a. **Holotype** of *Lithophyllum bahrijense* Bosence, 1983. Miocene. Upper Coralline Limestone Formation. Bahrija, Malta. Colld Bosence, D. W. J. Presd 1982. Figd Bosence, D. W. J. 1983: 160; pl. 17, fig. 9 (V.60929a).

**V.62292a(1)** Slide. Miocene. Upper Coralline Limestone Formation. Maddelana Chapel, Dingli, Malta. Colld Bosence, D. W. J. Presd 1982. Figd Bosence, D. W. J. 1983: 160; pl. 17, figs 7,8 (erroneously as V.60929). Slide prepared from hand specimen V.62292.

**Lithophyllum besalotos Johnson, 1962**

**V.53700(1)** Slide. **Holotype** of *Lithophyllum besalotos* Johnson, 1962. Late Middle or Upper Eocene. West of Batu Gading, Sarawak. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Johnson, J. H. 1962: 159; pl. 4, figs 4,5.

**Lithophyllum borneoense Johnson, 1962**

**V.53697(1), V.53704(1)** Slides. Upper Eocene. West of Batu Gading, Sarawak. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Johnson, J. H. 1962: 158; pl. 4, fig. 2 (V.53704(1)), fig. 3 (V.53697(1)).

**V.53699(1)** Slide. **Holotype** of *Lithophyllum borneoense* Johnson, 1962. Upper Eocene. West of Batu Gading, Sarawak. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Johnson, J. H. 1962: 158; pl. 4, fig. 1.

**Lithophyllum glangeaudi Lemoine, 1939**

**V.53099(1)** Slide. Lower Miocene. Lailuk, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964b: 480; pl. 3, fig. 1 (misprinted as fig. 7).

**Lithophyllum mgarrense Bosence, 1983**

**V.60930-30a** Hand specimen V.60930, Slide V.60930a. **Holotype** of *Lithophyllum mgarrense* Bosence, 1983. Miocene. Upper Coralline Limestone Formation. Mgarr, Malta. Colld Bosence, D. W. J. Presd 1982. Figd Bosence, D. W. J. 1983: 164; pl. 17, figs 5,6 (V.60930a).

**Lithophyllum piai Conti, 1946**

**D.7965(1)** Slide. Miocene. Light-brown limestone. Madrak, 19km SSE of Erzerum, Turkey. Colld Oswald, F. & Lynch, W. N. B. 1898. Presd 1904. Figd Oswald, F. 1906: 452; pl. facing page 52, fig. 9 (as *Lithothamnion ramosissimum*). Fossil Bryozoa Collection.

**Lithophyllum prelichenoides Lemoine, 1917**

**V.53693c(1), V.53694b(1)** Slides. Lower? Miocene. East of Batu Gading, Sarawak. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Johnson, J. H. 1962: 162; pl. 5, fig. 2 (V.53693c(1)), fig. 3 (V.53694b(1)).

**Lithophyllum pseudoamphiroa Johnson, 1964**

**V.53092(1)** Slide. Middle Miocene. Bara, Jabal Sinjar, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964b: 482; pl. 3, figs 2,3 (misprinted as figs 4,6).

**Lithophyllum sarawakense Johnson, 1962**

**V.53696b(1)** Slide. **Holotype** of *Lithophyllum sarawakense* Johnson, 1962. Miocene? West of Batu Gading, Sarawak. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Johnson, J. H. 1962: 162; pl. 5, fig. 1.

**Lithophyllum? shebae Elliott, 1959**

**V.41659(1)** Slide. **Holotype** of *Lithophyllum? shebae* Elliott, 1959. Lower Cretaceous, Barremian/Aptian. Wady-i-Ghabar, Hadhramaut, South Yemen. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1959: 220; pl. 1, fig. 7.

**Lithophyllum traceyi Johnson, 1964**

**V.53693a(2)** Slide. Miocene. East of Batu Gading, Sarawak. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Johnson, J. H. 1962: 159; pl. 5, fig. 4.

**Lithoporella melobesioides (Foslie, 1904)**

V.41607(1)-08(1) Slides. Middle/Upper Eocene. Banik, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1956b: 333; pl. 2, fig. 7 (V.41607(1)), figs 10,11 (V.41608(1)).

V.41609(1)-10(1) Slides. Upper Jurassic. Well no. 28, Dukhan, Qatar. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1956b: 333; pl. 2, fig. 8 (V.41610(1)), fig. 9 (V.41609(1)).

V.53693a(1) Slide. Miocene. East of Batu Gading, Sarawak. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Johnson, J. H. 1962: 163; pl. 3, fig. 3.

V.60923a(3) Slide. Miocene. Upper Coralline Limestone Formation. Mgvar, Malta. Colld Bosence, D. W. J. Presd 1982. Figd Bosence, D. W. J. 1983: pl. 15, fig. 3 (erroneously as V.60922). Slide prepared from hand specimen V.60923.

**Lithothamnion ramosissimum (Reuss, 1848)**

D.7965(1) See: *Lithophyllum piai* Conti, 1946

D.7967(1) See: *Palaeothamnium archaeotypum* Conti, 1946

**Lithothamnion sp.**

V.11064a(1) See: *Amphiroa* sp.

**Lithothamnium magnum Capeder, 1900**

V.60924a(1) Slide. Miocene. Upper Coralline Limestone Formation. Tal-Merhida, Malta. Colld Bosence, D. W. J. Presd 1982. Figd Bosence, D. W. J. 1983: 152; pl. 15, figs 5,7. Slide prepared from hand specimen V.60924.

**Lithothamnium marianae Johnson, 1957**

V.53703(1) Slide. Upper Eocene. Bukit Besungai, Sarawak. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Johnson, J. H. 1962: 156; pl. 2, fig. 2.

**Lithothamnium praefructiculosum Maslov, 1956**

V.60925a(1) Slide. Miocene. Upper Coralline Limestone Formation. Ir-Ramla, Gozo, Malta. Colld Bosence, D. W. J. Presd 1982. Figd Bosence, D. W. J. 1983: 153; pl. 16, figs 1,2. Slide prepared from hand specimen V.60925.

**Lithothamnium saipanense Johnson, 1957**

V.53090(1) Slide. Lower Miocene. Lailuk, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964b: 478; pl. 2, fig. 1.

**Lithothamnium sp.**

V.53090(2) Slide. Lower Miocene. Lailuk, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964b: 478; pl. 2, figs 2,3.

**Lithothrix antiquum Elliott, 1982**

V.60116(1) Slide. Holotype of *Lithothrix antiquum* Elliott, 1982. Late Pleistocene. Raised reef. Mauritius. Colld Adams, C. G. 1979. Figd Elliott, G. F. 1982c: 62, text-fig. 1.

V.60116(2-3) Slide. Paratypes of *Lithothrix antiquum* Elliott, 1982. Late Pleistocene. Raised reef. Mauritius. Colld Adams, C. G. 1979. Figd Elliott, G. F. 1982c: 62, text-fig. 2 (V.60116(2)), text-fig. 3 (V.60116(3)).

**Mastopora fava (Salter, 1851)**

V.16092(1)-97(1), V.20736(1) Hand specimens V.16092-7, Slide V.20736. Lower Silurian, Lower Llandoveryan. Mulloch Hill Group. Mulloch Hill, Girvan, Ayrshire, Scotland. Gray, Mrs. R. Colln. Purchd 1920 (hand specimens) 1921 (slide). Figd Nicholson, H. A. & Etheridge, R. 1878: 18; pl. 9, fig. 7 (V.16094(1)), fig. 15 (V.16092(1)), fig. 16 (V.16093(1)), fig. 18 (V.16095(1)), fig. 20 (V.16096(1)), fig. 22 (V.16097(1)), fig. a, next to fig. 20 (V.20736(1)), (all as *Nidulites fava*).



**Mastopora fava (Salter, 1851)**

V.16104(1), V.16110(1), V.26810(1), V.26824a(1)-24b(1) Hand specimens V.16104, V.16110, V.26810, Slides V.26824a,b. Lower Silurian, Lower Llandoveryan. Mulloch Hill Group. Mulloch Hill, Girvan, Ayrshire, Scotland. Gray, Mrs. R. Colln. Purchd 1920 (V.16104, V.16110) 1937(V.26810, V.26824a,b). Figd Currie, E. D. & Edwards, W. N. 1943: 237; pl. 9, fig. 1 (V.26810(1)), fig. 2 (V.16104(1)), fig. 4 (V.16110(1)). Figd Elliott, G. F. 1972c: 366; pl. 7, fig. 3 (V.16110(1)), pl. 8, fig. 4, pl. 9, fig. 2 (V.26824b(1)), figs 1,3 (V.26824a(1)). Slides prepared from hand specimen V.26824.

**Mastopora parva (Nicholson & Etheridge, 1878)**

V.16119(1), V.16123a(1), V.16143(1) Hand specimens V.16119, V.16143, Slide V.16123a. Upper Ordovician, Caradocian. Lower Ardmillan Group, Balclatchie Formation. Balclatchie, Girvan, Ayrshire, Scotland. Gray, Mrs. R. Colln. Purchd 1920. Figd Currie, E. D. & Edwards, W. N. 1943: 236, text-fig. 1, pl. 11, figs 8,9 (V.16123a(1)), figs 5,6 (V.16143(1)), fig. 7 (V.16119(1)). Figd Elliott, G. F. 1972c: 364; pl. 5, fig. 2, pl. 7, figs 1,2, pl. 8, figs 1-3 (V.16123a(1)). Slide prepared from hand specimen V.16123.

**Melobesia cuboides Johnson, 1957**

V.53710(1) Slide. Upper Eocene. Kejin Tugang, Sarawak. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Johnson, J. H. 1962: 164; pl. 5, fig. 6.

**Melobesia sp.**

V.53089(1) Slide. Lower Miocene. Lailuk, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964b: 484; pl. 3, fig. 5.

**Mesophyllum commune Lemoine, 1939**

V.60923a(2) Slide. Miocene. Upper Coralline Limestone Formation. Mgvar, Malta. Colld Bosence, D. W. J. Presd 1982. Figd Bosence, D. W. J. 1983: pl. 15, fig. 2 (erroneously as V.60922). Slide prepared from hand specimen V.60923.

**Mesophyllum commune Lemoine, 1939**

V.60926a(1) Slide. Miocene. Upper Coralline Limestone Formation. Tá Baldu, Malta. Colld Bosence, D. W. J. Presd 1982. Figd Bosence, D. W. J. 1983: 156; pl. 16, fig. 5. Slide prepared from hand specimen V.60926.

**Mesophyllum iraquense Johnson, 1964**

V.53097(1) Slide. Middle Miocene. Bara, Jabal Sinjar, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964b: 480; pl. 1, fig. 5.

V.53098(1) Slide. Holotype of *Mesophyllum iraquense* Johnson, 1964. Middle Miocene. Bara, Jabal Sinjar, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964b: 480; pl. 1, fig. 6, pl. 2, fig. 7.

**Mesophyllum koritzae Lemoine, 1939**

V.60927a(1) Slide. Miocene. Upper Coralline Limestone Formation. Tá Gafan, Gozo, Malta. Colld Bosence, D. W. J. Presd 1982. Figd Bosence, D. W. J. 1983: 158; pl. 16, figs 8-10. Slide prepared from hand specimen V.60927.

**Mesophyllum lafittei Lemoine, 1939**

V.53091(2), V.53101(1) Slides. Lower Miocene. Lailuk, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964b: 480; pl. 2, figs 4,6 (V.53101(1)), fig. 5 (V.53091(2)).

**Mesophyllum sp.1 of Johnson, 1962**

V.53706(2) Slide. Upper? Eocene. Bukit Besungai, Sarawak. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Johnson, J. H. 1962: 157; pl. 2, fig. 4.

**Mesophyllum sp.2 of Johnson, 1962**

V.53706(1) Slide. Upper? Eocene. Bukit Besungai, Sarawak. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Johnson, J. H. 1962: 157; pl. 4, fig. 6.

**Mesophyllum vaughanii (Howe, 1918)**

V.53707(1) Slide. Upper Eocene. West of Batu Gading, Sarawak.  
Ogilvie-Gordon, M. M. Colln. Presd 1970.  
Figd Johnson, J. H. 1962: 157; pl. 3, figs 1,2.

**Microcodium elegans Glück, 1912**

V.20729c(1) Slide. Lower Palaeocene, Montian. Cosina Beds. Opcina, Trieste, Italy. Colln Edwards, W. N. Presd 1926.  
Figd Edwards, W. N. 1932: 214,215; pl. 10, figs 3,4. From hand specimen V.20729.

**Mitcheldeania gregaria Nicholson, 1888**

V.54197(1) Slide. Lower Carboniferous, Tournaisian. Lower Border Group, Main Algal Beds, highest limestone. Kershopefoot Quarry, Kershopefoot, Cumberland [Cumbria], England. Garwood, E. J. Colln. Presd 1950.  
Figd Garwood, E. J. 1931: 127; pl. 13, fig. 2.

**Mitcheldeania nicholsoni Wethered, 1886**

V.45237(1) See: *Girvanella nicholsoni* (Wethered, 1886)

**Mizzia velebitana Schubert, 1908**

V.41575(2) Slide. Permian. Darari Formation. Harur, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1968b: 54-56; pl. 13, fig. 3.

V.52074(1)-75(1), V.52076(1-6)  
Slides. Permian. Darari Formation. Ora, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 54-56; pl. 13, fig. 1 (V.52074(1)), fig. 2 (V.52075(1)), fig. 4 (V.52076(1)), fig. 5 (V.52076(2)), pl. 14, fig. 1 (V.52076(3)), fig. 2 (V.52076(4)), fig. 3 (V.52076(5)), fig. 4 (V.52076(6)).

**Muniera baconica Deecke, 1883**

V.41632(1), V.41810(1), V.52078(1-3), V.52079(1-2), V.52080(1) See: *Clypeina? solkani* Conrad & Radoičić, 1971

**Munieria sp.**

V.11063a(1)-63b(1)  
See: *Euspondyloporella* sp.

**Nanopora anglica Wood, 1964**

V.45813(1) Slide. Holotype of *Nanopora anglica* Wood, 1964. Lower Carboniferous, Viséan, D2. Hadrow Scar limestone. Hadrow Scar, Simonstone, Yorkshire, England. Presd Wood, A. 1963.  
Figd Wood, A. 1964: 182; pl. 31, fig. 1, pl. 32, figs 1,4.

V.55592(1) Slide. Lower Carboniferous, Viséan, D2. Carboniferous Limestone, Hadrow Scar Limestone. Hadrow Scar, Simonstone, Yorkshire, England. Presd Wood, A. 1968. Figd Wood, A. 1964: 182; pl. 32, fig. 2.

**Nematophycus logani Carruthers, 1872**

V.8461, V.8467 See: *Prototaxites logani* Dawson, 1859

**Nematophyton caledonianum Lang, 1926**

V.54498, V.54500, V.54503-04, V.54515, V.57878(1), V.57921(1)-23(1), V.57929(1) See: *Prototaxites caledonianum* (Lang, 1926)

**Nematophyton cf. forfareense Kidston, 1924**

V.54508 See: *Prototaxites cf. forfareense* (Kidston, 1924)

**Neomeris alternans L. & J. Morellet, 1939**

V.24924(1-3) Slide. Paratypes of *Neomeris alternans* L. & J. Morellet, 1939. Lower Oligocene, Rupelian. Corbula Clay. Rauville [Rauville-La-Place], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Morellet, L. & Morellet, J. 1939: 29,30; pl. 3, fig. 13 (V.24924(1)), fig. 14 (V.24924(2)), fig. 18 (V.24924(3)).

**Neomeris alternans L. & J. Morellet, 1939**

**V.24925(2-4)** Slide. **Paratypes** of *Neomeris alternans* L. & J. Morellet, 1939. Lower Oligocene, Rupelian. Corbula Clay. Rauville [Rauville-La-Place], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Carpenter, W. B. 1862: pl. 10, fig. 8 (V.24925(2) as *Dactylopora eruca*). Figd Morellet, L. & Morellet, J. 1939: 29,30; pl. 3, fig. 15 (V.24925(2)), fig. 16 (V.24925(3)), fig. 17 (V.24925(4)).

**V.24925(1)** Slide. **Holotype** of *Neomeris alternans* L. & J. Morellet, 1939. Lower Oligocene, Rupelian. Corbula Clay. Rauville [Rauville-La-Place], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Carpenter, W. B. 1862: pl. 10, fig. 10 (as *Dactylopora annulus*). Figd Morellet, L. & Morellet, J. 1939: 29,30; pl. 3, fig. 19.

**Neomeris bowdenensis Rácz, 1971**

**V.53924** Slide. **Holotype** of *Neomeris bowdenensis* Rácz, 1971. Lower Pliocene. Bowden Shell Bed. Jamaica. Presd Rácz, L. 1970. Figd Rácz, L. 1971: 623; pl. 116, figs 1,2, pl. 117, figs 1,2.

**V.53928** Slide. Lower Pliocene. Bowden Shell Bed. Jamaica. Presd Rácz, L. 1970. Figd Rácz, L. 1971: 623; pl. 116, fig. 4.

**Neomeris cretacea Steinmann, 1899**

**V.41585(1)** Slide. Upper Cretaceous, Campanian/Maastrichtian. Aqra-Bekhme limestone. Gal-i-Mazurka, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955b: 126; pl. 1, fig. 7. Figd Elliott, G. F. 1968b: 58,59; pl. 15, fig. 2.

**V.52077(1)** Slide. Upper Cretaceous, Maastrichtian. Bekhme Formation. Chia Gara, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 58,59; pl. 15, fig. 1. Specimen not located during preparation of this catalogue.

**Neomeris sp.**

**V.24874(1)** Slide. Middle Eocene, Lutetian. Bracklesham Group, Selsey Formation, Bed Fisher 22b. Medmerry Farm, Selsey, Sussex, England. Davis, A. G. Colln. Presd Trustees of the Godman Fund 1934. Figd Morellet, L. & Morellet, J. 1939: pl. 4, fig. 6.

**Neomeris sp.**

**V.24921(1-2)** Slide. Middle Eocene, Lutetian. Hauteville Beds. Hauteville [Hautteville-Bocage], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Carpenter, W. B. 1862: pl. 10, figs 27,28 (V.24921(1) as *Dactylopora glandulosa*). Figd Morellet, L. & Morellet, J. 1939: pl. 4, fig. 2 (V.24921(2)). Ref. Morellet, L. & Morellet, J. 1939: 39 (V.24921(1)).

**V.53929(1)** Slide. Lower Pliocene. Bowden Shell Bed. Jamaica. Presd Rácz, L. 1970. Figd Rácz, L. 1971: 626; pl. 117, fig. 3.

**V.57122(1)** Slide. Miocene. San Domingo, Jamaica. Parker, W. K. Colln. Purchd 1862. Figd Morellet, L. & Morellet, J. 1939: 25; pl. 1, fig. 1.

**cf. Neomeris sp.**

**V.24912(1)** Slide. Middle Eocene, Lutetian. Hauteville Beds. Hauteville [Hautteville-Bocage], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Carpenter, W. B. 1862: pl. 10, fig. 21 (as *Dactylopora reticulata*). Ref. Morellet, L. & Morellet, J. 1939: 38.

**Neomeris sp.1 of L. & J. Morellet, 1939**

**V.24921(3-4)** Slide. Middle Eocene, Lutetian. Hauteville Beds. Hauteville [Hautteville-Bocage], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Carpenter, W. B. 1862: pl. 10, fig. 25 (V.24921(3) as *Dactylopora glandulosa*). Figd Morellet, L. & Morellet, J. 1939: 28; pl. 4, fig. 1 (V.24921(4)). Ref. Morellet, L. & Morellet, J. 1939: 28 (V.24921(3)).

**Neomeris sp.2 of L. & J. Morellet, 1939**

**V.24921(5-7)** Slide. Middle Eocene, Lutetian. Hauteville Beds. Hauteville [Hautteville-Bocage], Manche, France. Parker, W. K. Colln. Purchd 1862. Figd Carpenter, W. B. 1862: pl. 10, fig. 26 (V.24921(5,6 or 7) as *Dactylopora glandulosa*). Figd Morellet, L. & Morellet, J. 1939: 29; pl. 4, fig. 3 (V.24921(6)), fig. 4 (V.24921(7)). Ref. Morellet, L. & Morellet, J. 1939: 29 (V.24921(5)).



**Nidulites favus Salter, 1851**

V.16092(1)-97(1), V.20736(1)  
See: *Mastopora fava* (Salter, 1851)

**Novantiella ordoviciana Elliott, 1972**

V.16124b(1) Slide. Paratype of *Novantiella ordoviciana* Elliott, 1972. Upper Ordovician, Caradocian. Lower Ardmillan Group, Balclatchie Formation. Balclatchie, Girvan, Ayrshire, Scotland. Gray, Mrs. R. Colln. Purchd 1920. Figd Elliott, G. F. 1972c: 362; pl. 6, fig. 2. Slide prepared from hand specimen V.16124.

V.16124a(1) Slides. Holotype of *Novantiella ordoviciana* Elliott, 1972. Upper Ordovician, Caradocian. Lower Ardmillan Group, Balclatchie Formation. Balclatchie, Girvan, Ayrshire, Scotland. Gray, Mrs. R. Colln. Purchd 1920. Figd Elliott, G. F. 1972c: 362; pl. 6, fig. 1. Slides prepared from hand specimen V.16124.

**Pachytheca hookeri Kidston & Lang, 1924**

V.8485-88, V.8490-92, V.8502 Slides. Upper Silurian, Wenlockian. Discina Beds. Tymawr Quarry, Rumney, near Cardiff, Glamorgan [South Glamorgan], Wales. Storrie, J. Colln. Acquisition history unknown. Figd Barber, C. A. 1891: 145-162; pl. 9, figs 1,1a (V.8485), figs 2,2a (V.8486), fig. 3 (V.8487), fig. 4 (V.8488), fig. 6 (V.8491), fig. 7 (V.8490), fig. 10 (V.8502) (all as *Pachytheca* sp.). Transd Botany Dept. 1898.

V.8496, V.8498 Slides. Syntypes of *Pachytheca hookeri* Kidston & Lang, 1924. Upper Silurian, Wenlockian. Wenlock Limestone. Malvern district, Herefordshire [Hereford and Worcester], England. Colld Grindrod, Dr. Presd Hooker, Sir J. D. 1891. Figd Barber, C. A. 1889: 141,142; pl. 9, figs 2,3?,4?,?6 (V.8496 as *Pachytheca* sp.), figs 1,5?,7? (V.8498 as *Pachytheca* sp.). Figd Kidston, R. & Lang, W. H. 1924: 605; pl. 1, figs 2-5 (V.8496).

**Pachytheca sp.**

V.8485-88, V.8490-92, V.8496, V.8498, V.8502 See: *Pachytheca hookeri* Kidston & Lang, 1924

**Pachytheca sp.**

V.26555(2), V.26557(1) Hand specimens. Lower Devonian, Siegenian/Emsian. Lower Old Red Sandstone, Senni Beds. Talybont Reservoir, 7km SE of Brecon, Brecknock [Powys], Wales. Croft, W. N. Colln. Presd 1940. Figd Croft, W. N. & Lang, W. H. 1942: 158; pl. 11, fig. 71 (V.26555(2)), fig. 78 (V.26557(1)).

V.54606, V.54608, V.54615-16, V.54661, V.57880(1) Hand specimen V.57880, Slides V.54606, V.54608, V.54615-16, V.54661. Upper Silurian, Downtonian. Tarrington Quarry, Hereford, Herefordshire [Hereford and Worcester], England. Lang, W. H. Colln. Bequest 1960. Figd Lang, W. H. 1937: 276; pl. 14, fig. 113 (V.57880(1)), fig. 114 (V.54608), figs 115-6 (V.54606), fig. 117 (V.54615), fig. 118 (V.54616), fig. 119 (V.54661). Ex. Lang nos 716,718,725-6,771,123a.

V.54835-37 Slides. Upper Silurian, Downtonian. Bone Bed. Saltwell's Inlier, near Dudley, Worcestershire [Hereford and Worcester], England. Lang, W. H. Colln. Bequest 1960. Figd Lang, W. H. 1937: 276; pl. 14, fig. 120 (V.54835), figs 121-3 (V.54836), fig. 124 (V.54837). Ex. Lang nos 945-7.

V.57878(2) Hand specimen. Lower Devonian, Siegenian. Lower Old Red Sandstone, Carmyllie Bed. Balgarvies Quarry, Forfar, Angus [Tayside], Scotland. Lang, W. H. Colln. Bequest 1960. Figd Lang, W. H. 1926: pl. 2, fig. 15. Ex. Lang no.50.

V.57919(1) Hand specimen. Upper Silurian, Downtonian. Mordiford Quarry, Hereford, Herefordshire [Hereford and Worcester], England. Lang, W. H. Colln. Bequest 1960. Figd Lang, W. H. 1937: 276; pl. 14, fig. 112. Ex. Lang no.286a.

**Pagodaporella wetzeli Elliott, 1956**

V.41604(1) Slide. Holotype of *Pagodaporella wetzeli* Elliott, 1956. Palaeocene. Kolosh Formation. Bekhme, Erbil Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1956b: 333; pl. 2, fig. 3. Figd Elliott, G. F. 1968b: 59-61; pl. 17, fig. 10.

**Pagodaporella wetzeli Elliott, 1956**

V.41605(1) Slide. Palaeocene. Kolosh Formation. Bekhme, Erbil Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1956b: 333; pl. 2, fig. 4. Figd Elliott, G. F. 1968b: 59-61; pl. 17, fig. 9.

**Palaeachlya penetrans Duncan, 1876**

P.3645(1) Hand specimen. Lower Devonian. Helderburg Group. New Brunswick, Canada. Duncan, D. M. Colln. Presd 1880. Figd Duncan, D. M. 1879: 90; pl. 9, fig. 7. Fossil Sponge Collection. Within specimen of *Hindia fibrosa* Roemer.

**Palaeodasycladus mediterraneus Pia, 1920**

V.52081(1-2), V.52082(1-2), V.52083(1) Slides. Lower Jurassic, Lias. Lower Musandam Formation. Wady Bih, Qamar Peninsula, Oman. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 61-64; pl. 16, fig. 1 (V.52081(1)), fig. 2 (V.52081(2)), fig. 3 (V.52082(1)), fig. 4 (V.52082(2)), fig. 5 (V.52083(1)).

**Palaeonitella tarafiyensis Hill & El-Khayal, 1983**

V.60935(1) Hand specimen. Holotype of *Palaeonitella tarafiyensis* Hill & El-Khayal, 1983. Upper Permian. Middle Khuff Beds. Quarry, 15km NNE of Buraydah, Qasim Province, Saudi Arabia. Colld El-Khayal, A. A. Presd 1983. Figd Hill, C. R. & El-Khayal, A. A. 1983: 107; figs 10,12-18. Nodes, internodes and associated oogonia.

**Palaeoporella lummatonensis Elliott, 1961**

V.42603(1)-07(1), V.42608(1-3), V.42609(1) See: *Pseudopalaeoporella lummatonensis* (Elliott, 1961)

**Palaeosiphonium convolvens (Praturlon, 1964)**

V.62034(1) Slide. Middle Jurassic, basal Upper Bathonian, *Hodsoni* Zone. Great Oolite, Upper White Limestone. Fowler's Hill, Quenington, Gloucestershire, England. Colld Elliott, G. F. Presd 1985. Figd Elliott, G. F. 1985: 283, text-figs 2-4.

**Palaeosiphonium convolvens (Praturlon, 1964)**

V.57651(1) Slide. Middle Jurassic, Bathonian. Great Oolite, Upper White Limestone. Daglingworth, Cirencester, Gloucestershire, England. Colld Elliott, G. F. Presd 1974. Figd Elliott, G. F. 1975a: 362; pl. 48, fig. 2 (as *Pseudocodium convolvens*). Figd Elliott, G. F. 1985: 283, text-fig. 1.

**Palaeothamnium archaetypum Conti, 1946**

D.7967(1) Slide. Miocene. Creamy-pink limestone. Kanjean, 48km N of Malazgirt, Turkey. Colld Oswald, F. & Lynch, W. N. B. 1898. Presd 1904. Figd Oswald, F. 1906: 453; pl. facing page 81, fig. 1 (as *Lithothamnium ramosissimum*). Fossil Bryozoa Collection.

**Parachaetetes asvapatii Pia, 1936**

V.51231(1) Slide. Palaeocene/Lower Eocene. Sinjar Formation. Sefin Dag, Shaqlawah, Rowunduz-Erbil, Erbil Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1963. Figd Elliott, G. F. 1965a: 696; pl. 104, fig. 1.

V.51232(1) Slide. Palaeocene/Lower Eocene. Sinjar Formation. Sedelan, Sulemania Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1963. Figd Elliott, G. F. 1965a: 696; pl. 104, fig. 2.

V.53077(1) Slide. Palaeocene. Galala, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964a: 212; pl. 3, fig. 5.

**Parachaetetes hadhramautensis Elliott, 1959**

V.41662(1) Slide. Holotype of *Parachaetetes hadhramautensis* Elliott, 1959. Lower Cretaceous, Barremian/Aptian. Wady-i-Ghabar, Hadhramaut, South Yemen. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1959: 222; pl. 2, fig. 2.

**Parachaetetes lichenoides Elliott, 1959**

V.41661(1) Slide. Holotype of *Parachaetetes lichenoides* Elliott, 1959. Upper Cretaceous, Upper Turonian. Mansourah, Aures, Algeria. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1959: 222; pl. 2, fig. 1.



**Parachaetetes sp.**

V.53078(1) Slide. Palaeocene. Galala, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964a: 212; pl. 3, fig. 6.

**Parka decipiens Fleming, 1831**

V.12643(1) Hand specimen. Lower Devonian. Lower Old Red Sandstone. Canterland?, Kincardineshire [Grampian], Scotland. Mitchell Colln. Presd 1893. Figd Edwards, W. N. 1921: 444; pl. 12, fig. 5.

V.31147(1)-48(1) (ex. 59167) Hand specimens. Lower Devonian, Dittonian. Lower Old Red Sandstone. Trimpley, near Kidderminster, Worcestershire [Hereford and Worcester], England. Presd Roberts, G. E. 1863. Figd Woodward, H. 1872: 79; pl. 16, fig. 10 (V.31147(1)), fig. 11 (V.31148(1)). Woodward(1872) states specimens obtained by Mr. Baugh, not Roberts.

V.54960, V.57852a(1) Hand specimen V.57852a, Slide V.54960. Lower Devonian, Dittonian. Lower Old Red Sandstone. Trimpley, near Kidderminster, Worcestershire [Hereford and Worcester], England. Lang, W. H. Colln. Bequest 1960. Figd Lang, W. H. 1937: 257,258; pl. 9, fig. 38 (V.57852a(1)), fig. 39 (V.54960). Ex. Lang nos 1070,262b.

V.57878(1) Hand specimen. Lower Devonian, Siegenian. Lower Old Red Sandstone, Carmyllie Bed. Balgarvies Quarry, Forfar, Angus [Tayside], Scotland. Lang, W. H. Colln. Bequest 1960. Figd Lang, W. H. 1926: pl. 2, fig. 15. Ex. Lang no. 50.

**Parka decipiens? Fleming, 1831**

V.3247(1) Hand specimen. Lower Devonian. Lower Old Red Sandstone. Canterland?, Kincardineshire, [Grampian], Scotland. Mitchell Colln. Presd 1893. Figd Edwards, W. N. 1921: 445; pl. 12, fig. 4.

**Perimneste horrida Harris, 1939**

V.26192 Slide. **Holotype** of *Perimneste horrida* Harris, 1939. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Moigne Down, Dorset, England. Sylvester-Bradley, P. C. & Harris, T. M. Colln. Presd 1939. Figd Harris, T. M. 1939: 54-65; pl. 14, figs 2,7,9. Oogonium surrounded by antheridia.

V.26193, V.26195 Slides. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Moigne Down, Dorset, England. Sylvester-Bradley, P. C. & Harris, T. M. Colln. Presd 1939. Figd Harris, T. M. 1939: 54-65; pl. 14, fig. 1 (V.26193), fig. 6 (V.26195). Oogonia.

V.26194 Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Moigne Down, Dorset, England. Sylvester-Bradley, P. C. & Harris, T. M. Colln. Presd 1939. Figd Harris, T. M. 1939: 54-65; pl. 14, figs 3,4. Antheridium.

V.26196 Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Moigne Down, Dorset, England. Sylvester-Bradley, P. C. & Harris, T. M. Colln. Presd 1939. Figd Harris, T. M. 1939: 54-65; pl. 14, fig. 8. Oogonium surrounded by antheridia.

V.26197 Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Durdle Door, Dorset, England. Sylvester-Bradley, P. C. & Harris, T. M. Colln. Presd 1939. Figd Harris, T. M. 1939: 54-65; pl. 14, fig. 5. Oogonium.

V.26198, V.26200 Slides. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 54-65; pl. 15, figs 1-3 (V.26198), figs 7-9 (V.26200). Gyrogonites.



## **Perimneste horrida Harris, 1939**

V.26199 Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham?, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 54-65; pl. 15, figs 4-6. Gyrogonite.

V.26201 Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Portesham?, Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 54-65; pl. 15, figs 10,11. Oogonium. Specimen missing from cell-mount.

V.26239-40, V.26242, V.26245(1) Hand specimen (V.26245), Slides (V.26239-40, V.26242). Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Durlston [Durlston Bay?], Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 54-65; pl. 13, figs 3,7 (V.26240), figs 4,6 (V.26239), fig. 5 (V.26242), figs 9,10 (V.26245(1)). Nodes.

V.26241 Slide. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Durlston [Durlston Bay?], Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 54-65; pl. 13, fig. 1. Internode.

V.26243(1-3) Hand specimen. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Durlston [Durlston Bay?], Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 54-65; pl. 16, fig. 6 (V.26243(1)), fig. 8 (V.26243(2)), fig. 9 (V.26243(3)). Nodes (V.26243(1-2)) and internodes (V.26243(3)).

V.26244(1) Hand specimen. Upper Jurassic, Portlandian. Middle Purbeck Beds, Lower Building Stone, Cherty Limestone. Durlston [Durlston Bay?], Dorset, England. Reid, C. R. & Groves, J. Colln. Bequest 1933. Figd Harris, T. M. 1939: 54-65, text-figs 12,13. Fertile leaf whorl.

## **Permocalculus ampullacea Elliott, 1959**

V.41663(1) Slide. Holotype of *Permocalculus ampullacea* Elliott, 1959. Lower Cretaceous, Hauterivian. Djebel Harraza, Ouled Nail, Algeria. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1959: 218; pl. 2, fig. 3.

V.41663(2-3) Slide. Lower Cretaceous, Hauterivian. Djebel Harraza, Ouled Nail, Algeria. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1961b: 82-84; pl. 11, fig. 1 (V.41663(2)), fig. 4 (V.41663(3)).

V.41664(1) Slide. Paratype of *Permocalculus ampullacea* Elliott, 1959. Lower Cretaceous, Valanginian. Well no. 116, Kirkuk, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1959: 218; pl. 2, fig. 4.

V.41732(1)-33(1) See: *Cylindroporella* sp.

## **Permocalculus digitatus Elliott, 1955**

V.41567(2) Slide. Holotype of *Permocalculus digitatus* Elliott, 1955. Upper Permian. Harur, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955a: 86; pl. 3, fig. 6.

V.41570(1) Slide. Paratype of *Permocalculus digitatus* Elliott, 1955. Upper Permian. Harur, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955a: 86; pl. 2, fig. 4.

## **Permocalculus forcepinus (Johnson, 1951)**

V.41569(1) Slide. Upper Permian. Harur, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955a: 86; pl. 2, fig. 3.

## **Permocalculus fragilis (Pia, 1937)**

V.41567(1) Slide. Upper Permian. Harur, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955a: 86; pl. 1, fig. 1.

V.41568(1) Slide. Upper Permian. Ora, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955a: 86; pl. 1, fig. 2.

### **Permocalculus inopinatus Elliott, 1956**

V.41611(1)-12(1) Slides. **Syntypes** of *Permocalculus inopinatus* Elliott, 1956. Lower Cretaceous, Aptian. Ru Kuchuk, Chama, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1956a: 341,342; fig. 1a (V.41612(1)), fig. 1b (V.41611(1)). Figd Elliott, G. F. 1958a: 254,255; pl. 47, fig. 3 (V.41612(1)), fig. 4 (V.41611(1)).

V.41636(1) Slide. Upper Cretaceous, Albian. Koi Sanjak, Erbil Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1958a: 254,255; pl. 45, fig. 3.

V.41637(1) Slide. Upper Cretaceous, Aptian. Jebel Gara, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1958a: 254,255; pl. 47, fig. 1.

### **Permocalculus irenae Elliott, 1958**

V.41633(1) Slide. **Holotype** of *Permocalculus irenae* Elliott, 1958. Upper Cretaceous, Cenomanian. Well, Mileh Tharthar, Dulaim Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1958a: 258,259; pl. 48, fig. 2.

V.41633(2) Slide. Upper Cretaceous, Cenomanian. Well, Mileh Tharthar, Dulaim Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1958a: 258,259; pl. 48, fig. 6.

V.41633(3), V.41638(1), V.41640(1) Slides. **Paratypes** of *Permocalculus irenae* Elliott, 1958. Upper Cretaceous, Cenomanian. Well, Mileh Tharthar, Dulaim Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1958a: 258,259; pl. 48, fig. 3 (V.41638(1)), fig. 4 (V.41633(3)), fig. 5 (V.41640(1)).

V.41639(1) Slide. Upper Cretaceous, Cenomanian. Well, Mileh Tharthar, Dulaim Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1958a: 258,259; pl. 47, fig. 2.

### **Permocalculus plumosus Elliott, 1955**

V.41574(1) Slide. **Holotype** of *Permocalculus plumosus* Elliott, 1955. Upper Permian. Harur, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955a: 87; pl. 3, fig. 5.

V.41574(2-4) Slide. **Paratypes** of *Permocalculus plumosus* Elliott, 1955. Upper Permian. Harur, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955a: 87; pl. 3, fig. 2 (V.41574(2)), fig. 3 (V.41574(3)), fig. 4 (V.41574(4)).

### **Permocalculus solidus (Pia, 1935)**

V.41571(1) Slide. Upper Permian. Ora, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955a: 86; pl. 2, fig. 5.

V.41572(1) Slide. Upper Permian. Harur, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955a: 86; pl. 2, fig. 6.

### **Permocalculus tenellus (Pia, 1935)**

V.41573(1) Slide. Upper Permian. Ora, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955a: 86; pl. 3, fig. 1.

### **Permoperplexella attenuata Elliott, 1968**

V.52084(1), V.52085(2-4) Slides. **Paratypes** of *Permoperplexella attenuata* Elliott, 1968. Permian. Zinnar Formation. Ora, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 64,65; pl. 17, fig. 1 (V.52084(1)), fig. 2 (V.52085(2)), fig. 3 (V.52085(3)), fig. 5 (V.52085(4)).

V.52085(1) Slide. **Holotype** of *Permoperplexella attenuata* Elliott, 1968. Permian. Zinnar Formation. Ora, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 64,65; pl. 17, fig. 4.

**Peyssonella antiqua Johnson, 1964**

V.53079(2) Slide. Holotype of *Peyssonella antiqua* Johnson, 1964. Palaeocene. Rowanduz, Erbil Liwa, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964a: 214; pl. 1, fig. 2.

**Pianella pygmaea (Gümbel, 1891)**

V.52086(1)-88(1) See: *Salpingoporella pygmaea* (Gümbel, 1891)

**Polygonella incrustata Elliott, 1957**

V.41610(1), V.41626(1) See: *Thaumtoporella parvovesiculifera* (Raineri, 1922)

**Prototaxites caledonianum (Lang, 1926)**

V.54498, V.54500, V.54503-04, V.57922(1)-23(1) Hand specimens V.57922-23, Slides V.54498, V.54500, V.54503-04. Syntypes of *Nematophyton caledonianum* Lang, 1926. Lower Devonian. Lower Old Red Sandstone. Balnashannor Quarry, Forfar, Angus [Tayside], Scotland. Lang, W. H. Colln. Bequest 1960. Figd Lang, W. H. 1926: 794-796; pl. 2, fig. 18 (V.57922(1)), fig. 19 (V.54498), fig. 20 (V.57923(1)), fig. 21 (V.54500), fig. 22 (V.54503), fig. 23 (V.54504) (all as *Nematophyton caledonianum*). Ex. Lang nos 608,610,613-4,88-9. Slides V.54500, V.54503-04, prepared from hand specimen V.57923. Slide V.54498 prepared from hand specimen V.57922.

V.54515, V.57878(1), V.57921(1), V.57929(1) Hand specimens V.57878, V.57921, V.57929, Slide V.54515. Syntypes of *Nematophyton caledonianum* Lang, 1926. Lower Devonian, Siegenian. Lower Old Red Sandstone, Carmyllie Bed. Balgarvies Quarry, Forfar, Angus [Tayside], Scotland. Lang, W. H. Colln. Bequest 1960. Figd Lang, W. H. 1926: 794-796; pl. 2, fig. 13 (V.57921(1)), fig. 15 (V.57878(1)), fig. 16 (V.57929(1)), fig. 24 (V.54515) (all as *Nematophyton caledonianum*). Ex. Lang nos 625,50,87,104.

**Prototaxites cf. forfareense (Kidston, 1924)**

V.54508 Slide. Lower Devonian. Lower Old Red Sandstone. Balruddery Quarry, Forfar, Angus [Tayside], Scotland. Lang, W. H. Colln. Bequest 1960. Figd Lang, W. H. 1926: 797; pl. 2, fig. 27 (as cf. *Nematophyton forfareense*). Ex. Lang no. 618.

**Prototaxites logani Dawson, 1859**

V.8461, V.8467 Slides. Part of Holotype of *Prototaxites logani* Dawson, 1859. Holotype of *Nematophycus logani* Carruthers, 1872. Lower Devonian. Gaspé, Quebec, Canada. Colln Logan, W. E. Presd Dawson, J. W. 1870. Figd Dawson, J. W. 1859: 484-486, text-fig. 4. Figd Carruthers, W. 1872: 164-168; pls 31,32 (as *Nematophycus logani*). Although the slides cannot be exactly matched to Carruthers drawings, there seems little doubt they are his 'type' specimens. On p.164 he states they are from "... that on which Principal Dawson's histological investigation of the plant is based". Therefore these slides are also part of Dawson's Holotype.

**Prototaxites sp.**

V.26550b Slide. Lower Devonian, Siegenian. Lower Old Red Sandstone, Senni Beds. Llanover Quarry, near Abergavenny, Monmouth [Gwent], Wales. Croft, W. N. Colln. Presd 1940. Figd Croft, W. N. & Lang, W. H. 1942: 156,157; pl. 11, fig. 72.

V.26555(1) Hand specimen. Lower Devonian, Siegenian/Emsian. Lower Old Red Sandstone, Senni Beds. Talybont Reservoir, 7km SE of Brecon, Brecknock [Powys], Wales. Croft, W. N. Colln. Presd 1940. Figd Croft, W. N. & Lang, W. H. 1942: 156,157; pl. 11, fig. 71.

V.54618-19, V.57924(1) Hand specimen V.57924, Slides V.54618-19. Upper Silurian, Downtonian. Temeside Shales. Tin Mill Race, near Ludlow, Shropshire, England. Lang, W. H. Colln. Bequest 1960. Figd Lang, W. H. 1937: 259; pl. 10, fig. 40 (V.57924(1)), fig. 41 (V.54618), figs 42,43 (V.54619). Ex. Lang nos 728-9,92b. Slides prepared from hand specimen V.57924.



**Prototaxites sp.**

V.54853-54, V.57950(1) Hand specimen V.57950, Slides V.54853-54. Upper Silurian, Downtonian. Freshwater East, Pembroke [Dyfed], Wales. Lang, W. H. Colln. Bequest 1960. Figd Lang, W. H. 1937: 260; pl. 10, fig. 44 (V.57950(1)), figs 45,46 (V.54853), fig. 47 (V.54854). Ex. Lang nos 962-3,244c. Slides prepared from hand specimen V.57950.

**Pseudaethesolithon iranicum Elliott, 1970**

V.53645-49 See: *Hydrolithon iranicum* (Elliott, 1970)

**Pseudocodium convolvens Pratulon, 1964**

V.57651(1) See: *Palaeosiphonium convolvens* (Pratulon, 1964)

**Pseudocymopolia orientalis Elliott, 1970**

V.54126(1)-27(1) Slides. Syntypes of *Pseudocymopolia orientalis* Elliott, 1970. Lower Cretaceous. Bau Limestone. Tebedu Road, Tubitu, Kuching, Sarawak. Elliott, G. F. Colln. Presd 1969. Figd Elliott, G. F. 1970a: 324; pl. 60, fig. 1 (V.54126(1)), fig. 2 (V.54127(1)).

**Pseudoepimastopora ampullacea Elliott, 1968**

V.52093(1-2), V.52094(1) Slides. Permian. Zinnar Formation. Ora, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 64,65; pl. 18, fig. 5 (V.52093(1)), fig. 6 (V.52093(2)), fig. 7 (V.52094(1)).

V.52089(1) Slide. Holotype of *Pseudoepimastopora ampullacea* Elliott, 1968. Permian. Zinnar Formation. Ora, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 67,68; pl. 18, fig. 1.

V.52090(1) Slide. Paratype of *Pseudoepimastopora ampullacea* Elliott, 1968. Permian. Zinnar Formation. Ora, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 64,65; pl. 18, fig. 2.

**Pseudoepimastopora cf. likana Kochansky & Herak, 1960**

V.52091(1)-92(1) Slides. Permian. Jebel Qamar, Oman. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 68; pl. 18, fig. 3 (V.52091(1)), fig. 4 (V.52092(1)).

**Pseudopalaeoporella lummatonensis (Elliott, 1961)**

V.42604(1), V.42607(1), V.42608(1-2), V.42609(1) Slides. Paratypes of *Palaeoporella lummatonensis* Elliott, 1961. Middle Devonian, Upper Givetian. Lummaton Shell-bed. Lummaton Hill, Torquay, Devon, England. Colln Elliott, G. F. Presd 1961. Figd Elliott, G. F. 1961a: 251; pl. 9, fig. 2 (V.42604(1)), fig. 5 (V.42607(1)), pl. 10, fig. 1 (V.42608(1)), fig. 2 (V.42609(1)), fig. 4 (V.42608(2)) all as *Palaeoporella lummatonensis*).

V.42605(1)-06(1), V.42608(3) Slides. Middle Devonian, Upper Givetian. Lummaton Shell-bed. Lummaton Hill, Torquay, Devon, England. Colln Elliott, G. F. Presd 1961. Figd Elliott, G. F. 1961a: 251; pl. 9, fig. 3 (V.42605(1)), fig. 4 (V.42606(1)), pl. 10, fig. 3 (V.42608(3)) (all as *Palaeoporella lummatonensis*).

V.42603(1) Slide. Holotype of *Palaeoporella lummatonensis* Elliott, 1961. Middle Devonian, Upper Givetian. Lummaton Shell-bed. Lummaton Hill, Torquay, Devon, England. Colln Elliott, G. F. Presd 1961. Figd Elliott, G. F. 1961a: 251; pl. 9, fig. 1 (as *Palaeoporella lummatonensis*).

**Pseudovermiporella sodalica Elliott, 1958**

V.41641(1) Slide. Holotype of *Pseudovermiporella sodalica* Elliott, 1958. Permian. Jebel Qamar, Oman. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1958b: 419,420; pl. 1, fig. 1. Figd Elliott, G. F. 1968b: 70-72; pl. 19, fig. 1.

V.41641(2), V.41642(1), V.41644(1), V.41645(2-4), V.41648(1) Slides. Permian. Jebel Qamar, Oman. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1958b: 419,420; pl. 1, fig. 2 (V.41642(1)), fig. 5 (V.41641(2)), fig. 6 (V.41645(2)), pl. 2, fig. 3 (V.41645(3)), fig. 4 (V.41645(4)), pl. 3, fig. 2 (V.41648(1)). Figd Elliott, G. F. 1968b: 70-72; pl. 19, fig. 3 (V.41644(1)).

**Pseudovermiporella sodalica Elliott, 1958**

V.41642(2), V.41643(1-2), V.41644(2), V.41645(1), V.41646(1)-47(1), V.41649(1-2) Slides. Paratypes of *Pseudovermiporella sodalica* Elliott, 1958. Permian. Jebel Qamar, Oman. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1958b: 419,420; pl. 1, fig. 3 (V.41643(1)), fig. 4 (V.41644(2)), pl. 2, fig. 2 (V.41645(1)), fig. 5 (V.41646(1)), fig. 6 (V.41643(2)), pl. 3, fig. 1 (V.41647(1)), fig. 3 (V.41649(1)), fig. 4 (V.41642(2)), fig. 7 (V.41649(2)). Figd Elliott, G. F. 1968b: 70-72; pl. 19, fig. 2 (V.41645), fig. 4 (V.41649(1)), fig. 5 (V.41642(2)).

**Pseudovermiporella sp.**

V.41650(1) See: *Vermiporella* sp.

**Pycnoporidium levantinum Johnson, 1964**

V.53080(1) Slide. Holotype of *Pycnoporidium levantinum* Johnson, 1964. Palaeocene. Galala, Iraq. Presd Johnson, J. H. & Iraq Petroleum Co. 1967. Figd Johnson, J. H. 1964a: 212; pl. 3, fig. 7.

**Pycnoporidium liasicum Elliott, 1963**

V.44937(1) Slide. Holotype of *Pycnoporidium liasicum* Elliott, 1963. Lower Jurassic. Piryi, north of Parga, Epirus, Greece. Presd Elliott, G. F. & Iraq Petroleum Co. 1962. Figd Elliott, G. F. 1963b: 180; pl. 1, figs 1,2.

**Pycnoporidium cf. liasicum Elliott, 1963**

V.57650(1) Slide. Middle Jurassic, Bathonian. Great Oolite, Upper White Limestone. Daglingworth, Cirencester, Gloucestershire, England. Colld Elliott, G. F. Presd 1974. Figd Elliott, G. F. 1975a: 356; pl. 48, fig. 1.

**Rhabdochara langeri (Ettingshausen, 1872)**

V.13980(1) (ex. 52911) Hand specimen. Syntypes of *Chara langeri* Ettingshausen, 1872. Eocene. Sagor, Carniola, Yugoslavia. Ettingshausen, C. von Colln. 1877. Figd Ettingshausen, C. von 1872: 162; pl. 1, figs 4a,b. Branches.

**Rhabdoporella intermedia Lewis, 1937**

V.24965a(2) Slide. Holotype of *Rhabdoporella intermedia* Lewis, 1937. Lower Silurian, basal Llandoveryan. Graig Wen Limestone. Graig Wen, 4km sw of Meiford, Montgomery [Powys], Wales. Presd Lewis, H. P. 1938. Figd Lewis, H. P. 1937: 620; pl. 14, fig. 12.

**Rhyniella vermiformis Croft & George, 1959**

V.32409(3) Slide. Holotype of *Rhyniella vermiformis* Croft & George, 1959. Lower Devonian, Siegenian. Rhynie Chert. Muir of Rhynie, Aberdeenshire, Scotland. Scourfield, D. J. Colln. Bequest 1956. Figd Croft, W. N. & George, E. A. 1959: 350-352; pl. 41, figs 1,2, pl. 43, fig. 18.

**Rothpletzella sp.**

V.60103a SEM stub. Silurian. Hamva Beds. Quarry, 200m SSE of Udderde Farm, Gotland, Sweden. Colld Hurst, J. M. Presd 1976. Figd Danielli, H. M. C. 1981: 90; fig. 2e,f.

**Salpingoporella annulata Carozzi, 1953**

V.52097(1), V.52099(1-2) Slides. Upper Jurassic. Well no. 28, Dukhan, Qatar. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 72,73; pl. 20, fig. 3 (V.52097(1)), fig. 4 (V.52099(1)), fig. 7 (V.52099(2)).

V.52098(1) Slide. Upper Jurassic. Well no. 2, Dukhan, Qatar. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 72,73; pl. 20, fig. 6.

**Salpingoporella cf. annulata Carozzi, 1953**

V.41634(1) Slide. Lower Cretaceous, Valanginian/Hauterivian. Jebel Gara, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1958a: 255; pl. 46, fig. 3.



**Salpingoporella apenninica Sartoni & Crescenti, 1962**

V.52095(1), V.52096(1-2) Slides. Upper Jurassic. Najmah Formation. Well no. 117, Kirkuk, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 73,74; pl. 20, fig. 1 (V.52095(1)), fig. 2 (V.52096(1)), fig. 5 (V.52096(2)).

**Salpingoporella arabica Elliott, 1968**

V.52100(1) Slide. Paratype of *Salpingoporella arabica* Elliott, 1968. Lower/Upper Cretaceous, Albion/Cenomanian. Qamchuqa Formation. Sarmord, Sulemania Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 74,75; pl. 21, fig. 1.

V.52101(1) Slide. Paratype of *Salpingoporella arabica* Elliott, 1968. Lower Cretaceous. Upper Musandam Formation. Jebel Hagab, Oman. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 74,75; pl. 21, fig. 2.

V.52102(1) Slide. Holotype of *Salpingoporella arabica* Elliott, 1968. Lower Cretaceous, Barremian/Aptian. Qamchuqa Formation. Surdash, Sulemania Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 74,75; pl. 21, fig. 3.

**Salpingoporella dinarica Radoičić, 1959**

V.52103(1-4), V.52105(1) Slides. Lower Cretaceous, Barremian/Aptian. Sarmord Formation. Sekhaniyan, Surdash, Sulemania Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 75-77; pl. 21, fig. 4 (V.52103(1)), pl. 22, fig. 3 (V.52103(2)), fig. 4 (V.52103(3)), fig. 5 (V.52103(4)), fig. 6 (V.52105(1)).

V.52104(1) Slide. Lower Cretaceous, Upper Aptian. Djebel Amsid, Constantinois, Algeria. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 75-77; pl. 22, fig. 2.

Z.902(1-12) Slide. Syntypes of *Hensonella cylindrica* Elliott, 1960. Lower Cretaceous, Barremian. Qamchuqa Formation. Sarmord, Sulemania Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1960: 229; pl. 8, fig. 1 (as *Hensonella cylindrica*). Figd Elliott, G. F. 1968b: 75-77; pl. 22, fig. 1. Fossil Microproblematica Collection.

**Salpingoporella pygmaea (Gümbel, 1891)**

V.52086(1)-88(1) Slides. Lower Cretaceous, Valanginian. Garagu Formation. Well no. 1, Mileh Tharthar, Dulaim Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 66; pl. 17, fig. 6 (V.52086(1)), fig. 7 (V.52087(1)), fig. 8 (V.52088(1)) (all as *Pianella pygmaea*).

**Sarfatiella dubari Conrad & Peybernès, 1974**

V.3213a(1)-13b(1) Slides. Middle Jurassic, Bathonian. Antankarana Province, N Malagasy. Presd Baron, Rev. R. 1895. Figd Elliott, G. F. 1983: 671; pl. 70, fig. 1 (V.3213a(1)), fig. 4 (V.3213b(1)). Slides prepared from hand specimen V.3213.

V.57659(1), V.57661(2) Slides. Middle Jurassic, Bathonian. Great Oolite, Upper White Limestone. Daglingworth, Cirencester, Gloucestershire, England. Colln Elliott, G. F. Presd 1974. Figd Elliott, G. F. 1975a: 362; pl. 50, fig. 2 (V.57659(1)), fig. 4 (V.57661(2)) (all as *Cylindroporella* cf. *arabica*). Figd Elliott, G. F. 1983: 671; pl. 70, fig. 2 (V.57659(1)), fig. 5 (V.57661(2)).

V.60942(1) Slide. Middle Jurassic, Middle/Upper Bathonian. Great Oolite, White Limestone. Grandage Cottages, Quenington, Cirencester, Gloucestershire, England. Colln Elliott, G. F. Presd 1983. Figd Elliott, G. F. 1983: 671; pl. 70, fig. 3.

**Schizothrix calcicola (Agardh, 1812)**

V.60932-34 Hand specimen V.60932, Slides V.60933-34. Recent. Squaw Island, Lake Canandaigua, Finger Lakes, New York State, USA. Presd Riding, R. 1986. Figd Riding, R. & Voronova, L. 1982: 108-112, fig. 6 (V.60932), fig. 7a,b (V.60933), fig. 7c,d (V.60934). Recent analogue for *Angulocellularia anistoma* Vologdin, 1982 and *A. mansurkaensis* Vologdin, 1982.

**Sedalanella segonzacae Elliott, 1986**

V.41606(5) Slide. Holotype of *Sedalanella segonzacae* Elliott, 1986. Palaeocene. Kolosh Formation. Sedalan, Sulemania Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1986b: 741, text-fig. 1a.



**Selliporella donzelli Sartoni & Crescenti, 1962**

V.54115(1) Slide. Middle Jurassic, Upper Dogger. South of Herzegovina, Yugoslavia. Elliott, G. F. Colln. Presd 1969. Figd Elliott, G. F. 1986a: fig. 4.

**Solenomeris o'gormanii Douvillé, 1924**

V.51233(1) Slide. Lower Eocene. Sinjar Formation. Mamissa, Balad Sinjar, Jabal Sinjar, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1963. Figd Elliott, G. F. 1965a: 697; pl. 105, fig. 1.

V.51234(1-2), V.51235(1)-36(1), V.51239(1) Slides. Palaeocene. Sinjar Formation. Well no. 116, Kirkuk, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1963. Figd Elliott, G. F. 1965a: 697; pl. 105, figs 2,3, pl. 106, figs 1,2 (V.51234(1)), fig. 3 (V.51235(1)), pl. 107, fig. 1 (V.51234(2)), fig. 2 (V.51236(1)), pl. 108, fig. 3 (V.51239(1)).

**Solenopora garwoodi Hinde, 1913**

V.15966(1)-66b(1) Hand specimen V.15966, Slides V.15966a,b. Syntype of *Solenopora garwoodi* Hinde, 1913. Lower Carboniferous, Tournaisian, Cl. Carboniferous Limestone, Shap and Ravenstonedale Dolomite, Solenopora Bed. Stonegill, Westmorland [Cumbria], England. Hinde, G. J. Colln. Presd 1918. Figd Hinde, G. J. 1913: 290-292; pl. 10, fig. 5 (V.15966a(1)).

V.54188(1) Slide. Syntype of *Solenopora garwoodi* Hinde, 1913. Lower Carboniferous, Tournaisian, Cl. Carboniferous Limestone, Shap and Ravenstonedale Dolomite, Solenopora Bed. Shap Abbey Cliff, near Shap, Westmorland [Cumbria], England. Garwood, E. J. Colln. Presd 1950. Figd Hinde, G. J. 1913: 290-292; pl. 10, figs 2,6,7.

V.54190(1) Slide. Lower Carboniferous, Tournaisian, Cl. Carboniferous Limestone, Shap and Ravenstonedale Dolomite, Solenopora Bed. Shap Abbey Cliff, near Shap, Westmorland [Cumbria], England. Garwood, E. J. Colln. Presd 1950. Figd Garwood, E. J. 1912: 459; pl. 47, fig. 1.

**Solenopora garwoodi Hinde, 1913**

V.54208(1) Slide. Syntype of *Solenopora garwoodi* Hinde, 1913. Lower Carboniferous. Carboniferous Limestone. Low Meathop, Arnside, Lancashire, [Cumbria], England. Garwood, E. J. Colln. Presd 1950. Figd Hinde, G. J. 1913: 290-292; pl. 10, figs 1,3,4.

**Solenopora gracilis Garwood & Goodyear, 1918**

V.55326(1) Slide. Silurian, Lower Wenlock. Woolhope Limestone. Old Quarry, Dolyhir, Old Radnor, Radnor [Powys], Wales. Garwood, E. J. Colln. Presd 1950. Figd Garwood, E. J. 1945: 149; pl. 5.

V.55327(1) Slide. Silurian, Lower Wenlock. Woolhope Limestone. Old Quarry, Dolyhir, Old Radnor, Radnor [Powys], Wales. Garwood, E. J. Colln. Presd 1950. Figd Wood, A. 1944: 111; pl. 5, fig. b.

V.55328(1) Slide. Holotype of *Solenopora gracilis* Garwood & Goodyear, 1918. Silurian, Lower Wenlock. Woolhope Limestone. Old Quarry, Dolyhir, Old Radnor, Radnor [Powys], Wales. Garwood, E. J. Colln. Presd 1950. Figd Garwood, E. J. & Goodyear, E. 1918: 27,28; pl. 6, figs 1,2.

**Solenopora jurassica Brown, 1894**

V.60738-50 Hand specimens V.60738-42, Slides V.60743-50. Neotype of *Solenopora jurassica* Brown, 1894. Middle Jurassic, basal Upper Bathonian, *Hodsoni* Zone. Great Oolite, Upper White Limestone. Foss Cross, Chedworth, Gloucestershire, England. Presd Harland, T. L. & Torrens, H. S. 1982. Figd Harland, T. L. & Torrens, H. S. 1982: 907; pl. 100, fig. 1 (V.60738), figs 2,6 (V.60743), fig. 5 (V.60744), fig. 7 (V.60747), fig. 8 (V.60749).

V.60751-52 Slides. Middle Jurassic, basal Upper Bathonian, *Hodsoni* Zone. Great Oolite, Upper White Limestone. Foss Cross, Chedworth, Gloucestershire, England. Presd Harland, T. L. & Torrens, H. S. 1982. Figd Harland, T. L. & Torrens, H. S. 1982: 907; pl. 100, fig. 4 (V.60751), fig. 5 (V.60752).

**Solenopora peachii (Nicholson & Etheridge, 1867)**

V.16080(1) Hand specimen. Lower Ordovician, Llandeilian. Barr Group, Stinchur Limestone. Craighead, Girvan, Ayrshire, Scotland. Gray, Mrs. R. Colln. Purchd 1920. Figd Nicholson, H. A. & Etheridge, R. 1878: 31; pl. 2, fig. 1b (as *Tetradium peachii*).

**Sphaerochara subglobosa (Groves, 1926)**

V.18331(1-14) Slide. Syntypes of *Chara subglobosa* Groves, 1926. Lower Oligocene, Rupelian. Bembridge Marls. Whitecliff Bay, Isle of Wight, England. Colld 1917. Groves, J. Colln. Presd 1926. Figd Groves, J. 1926: 172; pl. 12, fig. 3 (V.18331(3)?,(5)?,(2)?) (as *Chara subglobosa*). Gyrogonites.

**Sphaerocodium gotlandicum Rothpletz, 1908**

V.55329(1)-30(1) Slides. Silurian, Lower Wenlock. Woolhope Limestone. Old Quarry, Dolyhir, Old Radnor, Radnor, [Powys], Wales. Garwood, E. J. Colln. Presd 1950. Figd Garwood, E. J. & Goodyear, E. 1918: pl. 6, fig. 3 (V.55329(1)), fig. 4 (V.55330(1)).

**Sphaerospongia hospitalis Salter, 1873**

V.53052(1) See: *Cyclocrinites hospitalis* (Salter, 1873)

**Sphaerospongia melliflua Salter, 1865**

V.53048(1)-49(1) See: *Cyclocrinites melliflua* (Salter, 1865)

**Stenixys cosmarioides Harris, 1938**

V.24810a(1) Hand specimen. Upper Triassic, Rhaetian. Naiadita Bed. Pen Park Road, Bristol, Gloucestershire, [Avon], England. Kellaway, G. A. Colln. Presd 1936. Figd Harris, T. M. 1938: 14-16, text-fig. 3e.

**Stenixys cosmarioides Harris, 1938**

V.25300(1)-07(1) Hand specimens. Upper Triassic, Rhaetian. Naiadita Bed. Henleaze Road, Bristol, Gloucestershire [Avon], England. Kellaway, G. A. & Harris, T. M. Colln. Presd 1937. Figd Harris, T. M. 1938: 14-16, text-fig. 3a (V.25300(1)), 3b (V.25301(1)), 3c (V.25302(1)), 3d (V.25303(1)), 3f (V.25304(1)), 3g (V.25305(1)), 3h (V.25306(1)), 3i (V.25307(1)).

V.25308(1) Hand specimen. Holotype of *Stenixys cosmarioides* Harris, 1938. Upper Triassic, Rhaetian. Naiadita Bed. Henleaze Road, Bristol, Gloucestershire, [Avon], England. Kellaway, G. A. & Harris, T. M. Colln. Presd 1937. Figd Harris, T. M. 1938: 14-16, text-fig. 3j.

**Stephanochara vectensis (Groves, 1926)**

V.18321(1-21), V.18322(1-6) Slides. Syntypes of *Chara vectensis* Groves, 1926. Upper Eocene/Lower Oligocene, Priabonian/Rupelian. Bembridge Beds. Cowes, Isle of Wight, England. A'Court-Smith, J. E. E. Colln. Purchd Wooley, R. W. 1924. Figd Groves, J. 1926: 172, text-fig. 19 (specific gyrogonite could not be determined), pl. 12, figs 2 (V.18321(7),(6),(16)), 8 (V.18321(3)?,(17),(20)) (as *Chara vectensis*). Gyrogonites.

**Stichoporella stutterdi (Carruthers, 1867)**

V.3442(1) Hand specimen. Middle Jurassic, Lower Bathonian. Stonesfield Beds. Stonesfield, Oxfordshire, England. Purchd Brodie, Rev. P. B. 1895. Figd Edwards, W. N. 1928: 79; pl. 3, fig. 3.

V.5585(1)-85a(1) Hand specimen V.5585, Slide V.5585a. Middle Jurassic, Lower Bathonian. Stonesfield Beds. Stonesfield, Oxfordshire, England. Acquisition history unknown. Figd Edwards, W. N. 1928: 79; pl. 3, fig. 4 (V.5585(1)). Figd Elliott, G. F. 1979: 408; pl. 45, fig. 2 (V.5585(1)), fig. 4 (V.5585a(1)). Transd Botany Dept. 1898.

**Stichoporella stutterdi (Carruthers, 1867)**

V.10968(1) Hand specimen. Middle Jurassic, Lower Bathonian. Stonesfield Beds. Stonesfield, Oxfordshire, England. Witchell, E. Colln. Purchd Witchell, E. N. 1905. Figd Elliott, G. F. 1979: 408; pl. 45, figs 1,3.

**Subterraniophyllum thomasi Elliott, 1957**

V.34620(1) Slide. Oligocene. Falaij, Oman. Presd Elliott, G. F. & Iraq Petroleum Co. 1957. Figd Elliott, G. F. 1957b: 73; pl. 13, figs 1,6.

V.34628(1) Slide. **Holotype** of *Subterraniophyllum thomasi* Elliott, 1957. Middle Oligocene. Well no. 6, Gach Saran, Persia [Iran]. Presd Elliott, G. F. & Iraq Petroleum Co. 1957. Figd Elliott, G. F. 1957b: 73; pl. 13, fig. 5.

V.34628(2), V.34629(1-3) Slides. **Paratypes** of *Subterraniophyllum thomasi* Elliott, 1957. Middle Oligocene. Well no. 6, Gach Saran, Persia [Iran]. Presd Elliott, G. F. & Iraq Petroleum Co. 1957. Figd Elliott, G. F. 1957b: 73; pl. 13, fig. 2 (V.34628(2)), fig. 3 (V.34629(1)), fig. 4 (V.34629(2)), fig. 9 (V.34629(3)).

V.34631(1) Slide. Oligocene. Tawai Silaim, Oman. Presd Elliott, G. F. & Iraq Petroleum Co. 1957. Figd Elliott, G. F. 1957b: 73; pl. 13, figs 7,8.

**Suppiluliumaella polyreme Elliott, 1968**

V.53445(2-4) Slide. **Paratypes** of *Suppiluliumaella polyreme* Elliott, 1968. Lower Cretaceous. Amasya, Turkey. Elliott, G. F. Colln. Presd 1967. Figd Elliott, G. F. 1968a: 495; pl. 95, fig. 2 (V.53445(2)), fig. 3 (V.53445(3)), fig. 4 (V.53445(4)).

V.53445(1) Slide. **Holotype** of *Suppiluliumaella polyreme* Elliott, 1968. Lower Cretaceous. Amasya, Turkey. Elliott, G. F. Colln. Presd 1967. Figd Elliott, G. F. 1968a: 495; pl. 95, fig. 1.

**Tauridium kurdistanensis Elliott, 1970**

V.54132(1) Slide. **Holotype** of *Tauridium kurdistanensis* Elliott, 1970. Lower Permian. Zinnar Formation. Harur, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1969. Figd Elliott, G. F. 1970b: 328; pl. 62, fig. 4.

**Tauridium kurdistanensis Elliott, 1970**

V.54133(1) Slide. **Paratype** of *Tauridium kurdistanensis* Elliott, 1970. Upper Permian. Darari Formation. Ora, Mosul Liwa, Iraq. Elliott, G. F. Colln. Presd 1969. Figd Elliott, G. F. 1970b: 328; pl. 62, fig. 3.

**Tauridium sp.**

V.41596(1), V.41698(1) Slides. **Syntypes** of *Epimastopora minima* Elliott, 1956. Upper Permian. Harur, Mosul Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1956b: 327,328; pl. 1, fig. 1 (V.41596(1)), fig. 3 (V.41598(1)) (all as *Epimastopora minima*).

V.54065(1) Slide. Upper Permian. Djebel Tebega, Tunisia. Elliott, G. F. Colln. Presd 1969. Figd Elliott, G. F. 1982a: 434; pl. 45, fig. 7.

**Terquemella bellovacina Munier-Chalmas, 1920**

V.41589(1) Slide. Palaeocene/Lower Eocene. Sinjar Formation. Sirwan, Sulemania Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955b: 126; pl. 1, fig. 11 (right hand specimen, as *Acicularia* sp. 1). Figd Elliott, G. F. 1968b: 78; pl. 23, fig. 6 (upper specimen).

V.41590(1) Slide. Palaeocene/Lower Eocene. Sinjar Formation. Sirwan, Sulemania Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955b: 126; pl. 1, fig. 12 (as *Acicularia* sp. 2). Figd Elliott, G. F. 1968b: 78; pl. 23, fig. 7.

**Terquemella globularis Elliott, 1956**

V.32496(1) Slide. Palaeocene/Lower Eocene. Sinjar Formation. Sirwan, Sulemania Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1956. Figd Elliott, G. F. 1968b: 78; pl. 23, fig. 8.

V.41589(2) Slide. Palaeocene/Lower Eocene. Sinjar Formation. Sirwan, Sulemania Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955b: 126; pl. 1, fig. 11 (left hand specimen, as *Acicularia* sp. 1). Figd Elliott, G. F. 1968b: 78; pl. 23, fig. 6 (lower specimen).



**Terquemella globularis Elliott, 1956**

V.41603(1) Slide. **Holotype** of *Terquemella globularis* Elliott, 1956. Palaeocene. Kolosh Formation. Bekhme, Erbil Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1956b: 332; pl. 2, fig. 2. Figd Elliott, G. F. 1968b: 78; pl. 23, fig. 5.

**Tetradium peachii Nicholson & Etheridge, 1867**

V.16080(1) See: *Solenopora peachii* (Nicholson & Etheridge, 1867)

**Teutloporella herculea (Stoppani, 1857)**

V.53673(1) Slide. Middle Triassic. Marmolata Limestone. Cernadoi, Alba, Fassa Valley, South Tirol [Dolomites], Italy. Ogilvie-Gordon, M. M. Colln. Presd 1970. Figd Ogilvie-Gordon, M. M. 1927: 76; pl. 10, fig. 14.

**Thaumatoporella parvovesiculifera (Raineri, 1922)**

V.41626(1) Slide. **Holotype** of *Polygonella incrustata* Elliott, 1957. Upper? Jurassic. Fahud, Oman. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1957a: 230; pl. 1, fig. 12 (as *Polygonella incrustata*).

V.41610(1) Slide. Upper Jurassic. Well no. 28, Dukhan, Qatar. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1957a: 230; pl. 1, fig. 11 (as *Polygonella incrustata*).

**Thyrsoporella silvestrii Pfender, 1940**

V.41588(1) Slide. Middle Eocene. Galaib, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955b: 129; pl. 1, fig. 10.

V.52106(1)-67(1), V.52109(1), V.52113(1) Slides. Middle Eocene. Jebel Tanamir, Fatah, Oman. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 79,80; pl. 23, fig. 1 (V.52106(1)), fig. 2 (V.52107(1)), fig. 4 (V.52109(1)), pl. 24, fig. 5 (V.52113(1)).

**Thyrsoporella silvestrii Pfender, 1940**

V.52108(1) Slide. Palaeocene/Lower Eocene. Kolosh Formation. Sedelan, Sulemania Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 79,80; pl. 23, fig. 3.

**Trinocladus exoticus Elliott, 1972**

V.56282(1-2), V.56283(1-2), V.56286(1) Slides. **Paratypes** of *Trinocladus exoticus* Elliott, 1972. Upper Cretaceous. Chert-Spilite Formation. Kuamat-Malabuk, Malua Area, Darvel Bay, Sabah, Malaysia. Presd Elliott, G. F. 1971. Figd Elliott, G. F. 1972b: 620; pl. 120, fig. 1 (V.56286(1)), fig. 2 (V.56283(1)), fig. (V.56282(1)), fig. 4 (V.56282(2)), fig. 5 (V.56283(2)).

V.56285(1) Slide. **Holotype** of *Trinocladus exoticus* Elliott, 1972. Upper Cretaceous. Chert-Spilite Formation. Kuamat-Malabuk, Malua Area, Darvel Bay, Sabah, Malaysia. Presd Elliott, G. F. 1971. Figd Elliott, G. F. 1972b: 620; pl. 120, fig. 6.

**Trinocladus perplexus Elliott, 1955**

V.41593(1)-94(1) Slides. **Syntypes** of *Trinocladus perplexus* Elliott, 1955. Palaeocene. Surdash, Sulemania Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955b: 128; pl. 1, fig. 16 (V.41593(1)), fig. 17 (V.41594(1)).

V.41595(1) Slide. **Syntype** of *Trinocladus perplexus* Elliott, 1955. Palaeocene. Koi Sanjak, Erbil Liwa, Iraq. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1955b: 128; pl. 1, fig. 18.

V.52110(2), V.52114(1)-15(1), V.52117(1) Slides. Palaeocene/Lower Eocene. Kolosh Formation. Koi Sanjak, Erbil Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 81,82; pl. 24, fig. 1 (V.52117(1)), fig. 2 (V.52110(2)), fig. 6 (V.52114(1)), fig. 7 (V.52115(1)).

**Trinocladus radoicicae Elliott, 1968**

V.52116(1-2) Slide. Syntypes of *Trinocladus radoicicae* Elliott, 1968. Upper Cretaceous, Maastrichtian. Tanjero Formation. Diza, Erbil Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 82,83; pl. 24, fig. 8.

**Trinocladus tripolitanus Raineri, 1922**

V.52111(1) Slide. Upper Cretaceous, Turonian. Well no. 1, Ras Sadr, Oman. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 81; pl. 24, fig. 3.

V.52112(1) Slide. Upper Cretaceous, Turonian. Sadr Formation. Well no. 1, Musaiyib, Hilla Liwa, Iraq. Elliott, G. F. Colln. Presd 1966. Figd Elliott, G. F. 1968b: 81; pl. 24, fig. 4.

**Trochiliscus podolicus Croft, 1952**

V.28338-39, V.28341, V.28345-52 Slides. Lower Devonian, Downtonian. Czortkov Series, Fish Bed. Jagielnica, 16km SW of Czortkov, West Podolia [Ukraine], Polish/Russian Border [USSR]. Colld Zych, W. 1934. Zych, W. & Godman Exploration Fund Colln. Presd 1935. Figd Croft, W. N. 1952: 194-199; pl. 18, fig. 3 (V.28338), pl. 18, fig. 4 (V.28339), pl. 18, fig. 5 (V.28341), pl. 19, fig. 18 (V.28345), pl. 18, fig. 16, pl. 19, fig. 17 (V.28346), pl. 18, fig. 15 (V.28347), text-fig. 2a-e, pl. 18, figs 6,7,12-14 (V.28348), text-fig. 2g-k, pl. 18, figs 8,11 (V.28349), text-fig. 2l (V.28350), text-fig. 2f (V.28351), pl. 18, figs 9,10 (V.28352). Gyrogonites.

V.28340 Slide. Holotype of *Trochiliscus podolicus* Croft, 1952. Lower Devonian, Downtonian. Czortkov Series, Fish Bed. Jagielnica, 16km SW of Czortkov, West Podolia [Ukraine], Polish/Russian Border [USSR]. Colld Zych, W. 1934. Zych, W. & Godman Exploration Fund Colln. Presd 1935. Figd Croft, W. N. 1952: 194-199; pl. 18, figs 1,2. Gyrogonite.

V.28556, V.28593-94 Slides. Lower Devonian, Downtonian. Cortzov Series, Fish Bed. Jagielnica, 16km SW of Cortzov, West Podolia [Ukraine], Polish/Russian Border [USSR]. Colld Zych, W. 1934. Zych, W. & Godman Exploration Fund Colln. Presd 1935. Figd Croft, W. N. 1952: 194-199; pl. 19, fig. 19 (V.28556), text-fig. 3a (V.28593), text-fig. 3c (V.28594). Gyrogonites.

**Tubulites permianus (King, 1850)**

V.35113(1) Hand specimen. Upper Permian. Magnesian Limestone. Shore at Easington, Co. Durham, England. Trechmann, C. T. Colln. Presd 1958. Figd Stoneley, H. M. M. 1958: 310; pl. 36, fig. 7.

**Tubulites permianus? (King, 1850)**

V.35111(1) Hand specimen. Upper Permian. Magnesian Limestone. Blackhall Rocks, N of Hartlepool, Yorkshire, England. Trechmann, C. T. Colln. Presd 1958. Figd Stoneley, H. M. M. 1958: 310; pl. 36, fig. 7.

**Ungdarella deceanglorum Elliott, 1970**

V.55400(4-5) Slide. Lower Carboniferous, Lower D2? White Limestone Division. Bron-heulog Quarry, Trefor Rocks, Llangollen, Denbigh [Clwyd], Wales. Garwood, E. J. Colln. Presd 1950. Figd Elliott, G. F. 1970c: 443; pl. 81, fig. 2 (V.55400(4)), fig. 5 (V.55400(5)).

V.55400(2-3) Slide. Paratypes of *Ungdarella deceanglorum* Elliott, 1970. Lower Carboniferous, Lower D2? White Limestone Division. Bron-heulog Quarry, Trefor Rocks, Llangollen, Denbigh [Clwyd], Wales. Garwood, E. J. Colln. Presd 1950. Figd Elliott, G. F. 1970c: 443; pl. 81, fig. 3 (V.55400(2)), fig. 4 (V.55400(3)).

V.55400(1) Slide. Holotype of *Ungdarella deceanglorum* Elliott, 1970. Lower Carboniferous, Lower D2? White Limestone Division. Bron-heulog Quarry, Trefor Rocks, Llangollen, Denbigh [Clwyd], Wales. Garwood, E. J. Colln. Presd 1950. Figd Elliott, G. F. 1970c: 443; pl. 81, fig. 1.

**Uraloporella variabilis Korde, 1950**

V.60808a(1) Slide. Lower Carboniferous. Llanelly Formation, Penllwyn Oolite, Uraloporella Bed. Pwll-du Quarry, Llangyndir, Monmouth [Gwent], Wales. Colld Wright, V. P. Presd 1982. Figd Wright, V. P. 1982: 151-155, text-fig. 1. Slide prepared from hand specimen V.60808.

**Uraloporella variabilis Korde, 1950**

V.60809a(1) Slide. Lower Carboniferous. Llanelly Formation, Penllwyn Oolite, Uraloporella Bed. Clydach Halt Limeworks, Llanelly, Monmouth [Gwent], Wales. Colld Wright, V. P. Presd 1982. Figd Wright, V. P. 1982: 151-155, text-fig 2. Slide prepared from hand specimen V.60809.

**Vermiporella cf. borealis Høeg, 1932**

V.55302b(2) Slide. Upper Ordovician, Caradocian. Lower Ardmillan Group, Craighead Limestone. Craighead, Girvan, Ayrshire, Scotland. Garwood, E. J. Colln. Presd 1950. Figd Elliott, G. F. 1972c: 361; pl. 5, fig. 1. Slide prepared from hand specimen V.55302.

**Vermiporella eisenacki Elliott, 1972**

V.53162b(1) Slide. Holotype of *Vermiporella eisenacki* Elliott, 1972. Lower Ordovician, Llandeilian. Barr Group, Stinchar Limestone. Tramitchell Quarry [Tormitchell Quarry], Givan, Ayrshire, Scotland. Garwood, E. J. Colln. Presd 1950. Figd Elliott, G. F. 1972c: 360; pl. 3, fig. 2. Slide prepared from hand specimen V.54162.

V.54162b(1) Slide. Paratype of *Vermiporella eisenacki* Elliott, 1972. Lower Ordovician, Llandeilian. Barr Group, Stinchar Limestone. Tramitchell Quarry [Tormitchell Quarry], Girvan, Ayrshire, Scotland. Garwood, E. J. Colln. Presd 1950. Figd Elliott, G. F. 1972c: 360; pl. 3, fig. 1. Slide prepared from hand specimen V.54162.

**Vermiporella sp.**

V.41650(1) Slide. Upper Permian. Jebel Tebaga, Tunisia. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Elliott, G. F. 1958b: 421; pl. 2, fig. 1 (as *Pseudovermiporella* sp.).

**Vermiporella sp.**

V.54386a(1) Slide. Lower Ordovician, Llandeilian. Barr Group, Stinchar Limestone. Benan Burn, Barr, Girvan, Ayrshire, Scotland. Garwood, E. J. Colln. Presd 1950. Figd Elliott, G. F. 1972c: 361; pl. 5, fig. 3. Slide prepared from hand specimen V.54386.

V.59776(1) Slide. Lower Ordovician, Llandeilian. Barr Group, Stinchar Limestone. Brochloch Quarry, Girvan, Ayrshire, Scotland. Colld Tripp, R. P. Presd 1978. Figd Tripp, R. P. 1979: 359; pl. 40, fig. 26.

**Verticilloporella dalmatica Ravin & Lorch, 1970**

V.41663(4-10) Slide. Syntypes of *Verticilloporella dalmatica* Ravin & Lorch, 1970. Lower Cretaceous, Hauterivian. Djebel Harraza, Ouled Nail, Algeria. Presd Elliott, G. F. & Iraq Petroleum Co. 1960. Figd Ravin, V. & Lorch, J. 1970: 234,235; pl. 1, figs 1-5 (V.41663(4-8)), pl. 2, figs 6-8 (V.41663(9-10)).

**Zonotrichites lissaviensis Bornemann, 1887**

V.51506(1)-10(1) Slides. Middle/Upper Triassic. Ghail limestone. Jebel Hagab, Oman. Presd Elliott, G. F. 1964. Figd Elliott, G. F. 1964: 568; pl. 1, fig. 1 (V.51506(1)), fig. 2 (V.51508(1)), pl. 2, figs 1,2 (V.51507(1)), fig. 3 (V.51510(1)), fig. 4 (V.51509(1)).

**Zonotrichites sp.**

V.57651(2) Slide. Middle Jurassic, Bathonian. Great Oolite, Upper White Limestone. Daglingworth, Cirencester, Gloucestershire, England. Colld Elliott, G. F. Presd 1974. Figd Elliott, G. F. 1975a: 352; pl. 48, fig. 3.



# References

- Barber, C. A. 1889-91. The structure of *Pachythea*. Part 1. *Annals of Botany*, London, 3: 141-148, 1 pl. (1889). Part 2. *Loc.cit.*, 5: 145-162, 1 pl. (1891).
- Bedford, R. & Bedford, R. W. 1934. New species of Archaeocyathinae and other organisms from the Lower Cambrian of Beltana. *Memoirs of the Kyancutta Museum*, 1: 1-7, pls 1-6.
- Bosence, D. W. J. 1983. Coralline algae from the Miocene of Malta. *Palaeontology*, London, 26: 147-173, pls 15-18.
- Carpenter, W. B. 1862. *Introduction to the study of foraminifera*. 319 pp., 22 pls. London.
- Carruthers, W. 1872. On the history, histological structure and affinities of *Nematophycus logani* Carr. (*Prototaxites logani* Dawson), an alga of Devonian age. *Monthly Microscopical Journal*, London, 8: 160-172, pls 1, 2.
- Costin, J. 1975. The Charales. In Barker, D. et al., Ostracods, land plants and Charales from the basal Purbeck Beds of Portesham Quarry, Dorset. *Palaeontology*, London, 18: 423-427, pl. 57.
- Croft, W. N. 1952. A new *Trochiliscus* (Charophyta) from the Downtonian of Podolia, eastern Europe. *Bulletin of the British Museum (Natural History)*, London, (Geol.) 1: 189-220, pls 18, 19.
- & George, E. A. 1959. Blue-green algae from the Middle Devonian of Rhynie, Aberdeenshire. *Bulletin of the British Museum (Natural History)*, London, (Geol.) 3: 339-353, pls 41-44.
- & Lang, W. H. 1942. The Lower Devonian flora of the Senni Beds of Monmouthshire and Breconshire. *Philosophical Transactions of the Royal Society of London*, (B) 231: 131-163, pls 1-3.
- Currie, E. D. & Edwards, W. N. 1943. Dasycladaceous algae from the Girvan area. *Quarterly Journal of the Geological Society of London*, 98: 235-240, 1 fig., pl. 11.
- Danielli, H. M. C. 1981. The fossil alga *Girvanella* Nicholson & Etheridge. *Bulletin of the British Museum (Natural History)*, London, (Geol.) 35: 79-107, 8 figs.
- Dawson, J. W. 1859. On fossil plants from the Devonian rocks of Canada. *Quarterly Journal of the Geological Society of London*, 15: 477-488, 4 figs.
- Duncan, D. M. 1879. On some Spheroidal Lithistid Spongida from the Upper Silurian of New Brunswick. *Annals and Magazine of Natural History; including Zoology, Botany and Geology*, London, (5) 4: 84-91, pl. 9.
- Edwards, W. N. 1921. Note on *Parka decipiens*. *Annals and Magazine of Natural History; including Zoology, Botany and Geology*, London, (9) 7: 442-444, 3 figs.
- 1928. On the algal nature of *Aroides stutterdi* Carruthers. *Annals and Magazine of Natural History; including Zoology, Botany and Geology*, London, (10) 1: 78-91, pl. 1.
- 1932. Lower Eocene plants from Istria. *Annals and Magazine of Natural History; including Zoology, Botany and Geology*, London, (10) 10: 213-216, pl. 10.
- Elliott, G. F. 1955a. The Permian calcareous alga *Gymnocodium*. *Micropaleontology*, New York, 1: 83-90, pls 1-3.
- 1955b. Fossil calcareous algae from the Middle East. *Micropaleontology*, New York, 1: 125-131, pl. 1.
- 1956a. *Galaxaura* (calcareous algae) and similar fossil genera. *Journal of the Washington Academy of Sciences*, 46: 341-343, 1 fig.
- 1956b. Further records of fossil calcareous algae from the Middle East. *Micropaleontology*, New York, 2: 327-334, pls 1, 2.
- 1957a. New calcareous algae from the Arabian Peninsula. *Micropaleontology*, New York, 3: 227-230, pl. 1.
- 1957b. *Subterraniophyllum*, a new Tertiary calcareous alga. *Palaeontology*, London, 1: 73-75, pl. 13.
- 1957c. Algues calcaires Codiacees fossiles d'Iraq, nouvelles et peu connues. *Bulletin de la Société Géologique de France*, Paris, (6) 6: 789-795, pl. 25.
- 1958a. Algal debris-facies in the Cretaceous of the Middle East. *Palaeontology*, London, 1: 254-259, pls 45-48.
- 1958b. Fossil Microproblematica from the Middle East. *Micropaleontology*, New York, 4: 419-428, pls 1-3.
- 1959. New calcareous algae from the Cretaceous of Iraq. *Revue de Micropaléontologie*, Paris, 1: 217-222, pls 1, 2.
- 1960. Fossil calcareous algal floras of the Middle East with a note on a Cretaceous problematicum, *Hensonella cylindrica* gen. et sp. nov. *Quarterly Journal of the Geological Society of London*, 115: 217-232, pl. 7.
- 1961a. A new British Devonian alga, *Palaeoporella lummatonensis*, and the brachiopod evidence of the age of the Lummaton Shell Bed. *Proceedings of the Geologists' Association*, London, 72: 251-260, pls 9, 10.

- 1961b. The sexual organization of Cretaceous *Permocalculus* (calcareous algae). *Palaeontology*, London, 4: 82-84, pl. 11.
- 1963a. Problematical microfossils from the Cretaceous and Palaeocene of the Middle East. *Palaeontology*, London, 6: 293-300, pls 46, 47.
- 1963b. A Liassic *Pyncnoporidium* (calcareous algae). *Eclogae Geologicae Helvetiae*, Basel, 56: 179-182, pl. 1.
- 1964. *Zonotrichites* (calcareous algae) from the Arabian Triassic. *Eclogae Geologicae Helvetiae*, Basel, 57: 567-570, pls 1, 2.
- 1965a. Tertiary Solenoporacean algae and the reproductive structures of the Solenoporaceae. *Palaeontology*, London, 7: 695-702, pls 104-108.
- 1965b. The interrelationships of some Cretaceous Codiaceae (calcareous algae). *Palaeontology*, London, 8: 199-203, pls 23, 24.
- 1966. Algal nodules from the Lias of the Middle East. *Geologica Romana*, Rome, 5: 291-302, pls 1-3.
- 1968a. Three new Tethyan Dasycladaceae (calcareous algae). *Palaeontology*, London, 11: 491-497, pls 93-95.
- 1968b. Permian to Palaeocene calcareous algae (Dasycladaceae) of the Middle East. *Bulletin of the British Museum (Natural History)*, London, (Geol.) Supp. 4: 6-111, pls 1-24.
- 1970a. *Pseudocymopolia*, a new Mesozoic Tethyan alga (Family Dasycladaceae). *Palaeontology*, London, 13: 323-326, pl. 60.
- 1970b. New and little-known Permian and Cretaceous Codiaceae (calcareous algae) from the Middle East. *Palaeontology*, London, 13: 327-333, pls 61, 62.
- 1970c. Calcareous algae new to the British Carboniferous. *Palaeontology*, London, 13: 443-450, pls 81-83.
- 1970d. *Pseudaethesolithon*, a calcareous alga from the Fars (Persian Miocene). *Geologica Romana*, Rome, 9: 31-46, pls 1-4.
- 1971a. A new fossil alga from the English Silurian. *Palaeontology*, London, 14: 637-641, pls 120, 121.
- 1971b. The nature of *Aciculella* Pia (calcareous algae). *Palaeontology*, London, 14: 629-636, pls 118, 119.
- 1972a. *Cretacicrusta* gen. nov., a possible alga from the English Cretaceous. *Palaeontology*, London, 15: 501-503, pls 100, 101.
- 1972b. *Trinocladus exoticus*, a new dasycladacean alga from the Upper Cretaceous of Borneo. *Palaeontology*, London, 15: 619-622, pl. 120.
- 1972c. Lower Palaeozoic green algae from southern Scotland, and their evolutionary significance. *Bulletin of the British Museum (Natural History)*, London, (Geol.) 22: 357-376, pls 1-10.
- 1975a. Transported algae as indicators of different marine habitats in the English Middle Jurassic. *Palaeontology*, London, 18: 351-366, pls 48-50.
- 1975b. Paleontology. In Elliott, G. F. & Süssli, P., *Imperiella* gen. nov., a new Alga from the Ruteh Limestone, Upper Permian (Central Alborz Mountains, North Iran). *Eclogae Geologicae Helvetiae*, Basle, 68: 452-454, pl. 1.
- 1978. A new dasycladacean alga from the Palaeocene of Kurdistan. *Palaeontology*, London, 21: 687-691, pl. 73.
- 1979. Taxonomy and opercular function of the Jurassic alga *Stichoporella*. *Palaeontology*, London, 22: 407-412, pl. 45.
- 1980. A new, possibly algal, microproblematicum from the Lower Carboniferous of England. *Bulletin of the British Museum (Natural History)*, London, (Geol.) 33: 73-77, pl. 1.
- 1981. Felix Oswald's Turkish algae. *Bulletin of the British Museum (Natural History)*, London, 35: 125-129, 3 figs.
- 1982a. A new calcareous green alga from the Middle Jurassic of England: its relationships and evolutionary position. *Palaeontology*, London, 25: 431-437, pl. 45.
- 1982b. A possible non-calcified dasycladacean alga from the Carboniferous of England. *Bulletin of the British Museum (Natural History)*, London, (Geol.) 36: 105-107, 1 fig.
- 1982c. New microfossil records in time and space. *Bulletin of the British Museum (Natural History)*, London, (Geol.) 36: 59-62, 6 figs.
- 1983. Distribution and affinities of the Jurassic dasycladacean alga *Sarfatiella*. *Palaeontology*, London, 26: 671-678, pl. 70.
- 1985. *Palaeosiphonium*, a problematic Jurassic alga. *Bulletin of the British Museum (Natural History)*, London, (Geol.) 38: 283-286, 4 figs.



- 1986a. English Jurassic dasyclads: seaweed indicators of marine climate. *Geology Today*, Oxford, 2: 20-23, 4 figs.
- 1986b. Isolated algal cysts in the Palaeocene-Lower Eocene of Kurdistan. *Palaeontology*, London, 29: 739-741, 1 fig.
- Ettingshausen, C. von. 1872. Fossile flora von Sagor in Krain. *Denkschriften der Kaiserlichen Akademie der Wissenschaften*, Wien, (Mathematische-Naturwissenschaftliche Classe) 32: 159-202, pls 1-10.
- Garwood, E. J. 1912. The Lower Carboniferous succession in the north-west of England. *Quarterly Journal of the Geological Society of London*, 68: 449-586, pls 44-56.
- 1931. The Tuedian Beds of northern Cumberland and Roxburghshire, east of the Liddel Water. *Quarterly Journal of the Geological Society of London*, 87: 97-159, pls 7-16.
- 1945. Note on the organs of reproduction in *Solenopora gracilis*. *Proceedings of the Geologists' Association*, London, 56: 147-148, pl. 5.
- & Goodyear, E. 1918. On the geology of the Old Radnor District, with special reference to an algal development in the Woolhope Limestone. *Quarterly Journal of the Geological Society of London*, 74: 1-29, pls 1-7.
- 1924. The Lower Carboniferous succession in the Settle District and along the line of the Craven Faults. *Quarterly Journal of the Geological Society of London*, 80: 184-281, pls 1-11.
- Gordon, W. T. 1920. Scottish National Antarctic Expedition 1902-1904: Cambrian organic remains from a dredging in the Weddell Sea. *Transactions of the Royal Society of Edinburgh*, 54: 681-714, pls 1-6.
- Groves, J. 1926. Section on the Charophyta. In Reid, E. M. & Chandler, M. E. J. *The Bembridge Flora. Catalogue of Cainozoic Plants in the Department of Geology*. 1: 165-173, 4 figs, pl. 12. London.
- Hallett, D. 1970. Foraminifera and algae from the Yoredale 'Series' (Viséan-Namurian) of northern England. *Compte Rendu. Congrès pour L'Avancement des Études de Stratigraphique (et de Géologie) Carbonifère* (6è, Sheffield, 1967), 3: 873-901, pls 1-8.
- Harland, T. L. & Torrens, H. S. 1982. A redescription of the Bathonian red alga *Solenopora jurassica* from Gloucestershire, with remarks on its preservation. *Palaeontology*, London, 25: 905-912, pl. 100.
- Harris, T. M. 1938. *The British Rhaetic flora*. xi + 84 pp., 26 figs, 5 pls. London.
- 1939. *British Purbeck Charophyta*. ix + 83 pp., 16 figs, 17 pls. London.
- 1961. *The Yorkshire Jurassic flora*. 1. *Thallophyta-Pteridophyta*. v + 212 pp., 71 figs. London.
- Hill, C. R. & El-Khayal, A. A. 1983. Late Permian plants including charophytes from the Khuff Formation of Saudi Arabia. *Bulletin of the British Museum (Natural History)*, London, (Geol.) 37: 105-112, 18 figs.
- Hinde, G. J. 1884. On the structure and affinities of the family Receptaculitidae, including therein the genera *Ischadites* Murchison (= *Tetragonis* Eichwald); *Sphaerospongia* Pengelly; *Acanthochonia* gen. nov.; and *Receptaculites* DeFrance. *Quarterly Journal of the Geological Society of London*, 40: 795-849, pls 36, 37.
- 1913. On *Solenopora garwoodi* sp. nov., from the Lower Cretaceous in the north-west of England. *Geological Magazine*, London, (5) 10: 289-292, pl. 10.
- Høeg, O. A. 1937. *Callisphenus gracilis* n. gen. n. sp., a fossil alga from the Wenlock of the Oslo region. *Norsk Geologisk Tidsskrift*, Oslo, 17: 43-46, pls 1, 2.
- Johnson, J. H. 1962. Cretaceous algae from Sarawak. In Haile, N. S., *The Geology and Mineral Resources of the Suai-Barram Area, North Sarawak. Memoirs. Geological Survey Department. British Territories in Borneo*, 13: 151-168, pls 1-5.
- 1964a. Palaeocene calcareous red algae from northern Iraq. *Micropaleontology*, New York, 10: 207-216, pls 1-3.
- 1964b. Miocene coralline algae from northern Iraq. *Micropaleontology*, New York, 10: 477-485, pls 1-3.
- Kidston, R. 1903. The Fossil Plants of Canonbie, Dumfriesshire, and of parts of Cumberland and Northumberland. *Transactions of the Royal Society of Edinburgh*, 40: 741-833, pls 1-5.
- & Lang, W. H. 1924. Notes on fossil plants from the Old Red Sandstone of Scotland. 3. On two species of *Pachythea* (*P. media* and *P. fasciculata*) based on the characters of the algal filaments. *Transactions of the Royal Society of Edinburgh*, 53: 604-614, pls 1, 2.
- La Touche, J. D. 1884. *A Handbook of the Geology of Shropshire*. 91 pp., 22 pls. London & Shrewsbury.



- Lang, W. H. 1926. Contributions to the study of the Old Red Sandstone flora of Scotland. 5. On the identification of the large "stems" in the Carmyllie Beds of the Lower Old Red Sandstone as *Nematophyton*. *Transactions of the Royal Society of Edinburgh*, 54: 792-799, pls 1, 2.
- 1937. On the plant remains from the Downtonian of England and Wales. *Philosophical Transactions of the Royal Society of London*, (B) 227: 245-291, pls 8-14.
- Lewis, H. P. 1937. Calcareous algae (*Ortonella* and *Rhabdoporella*) in the Llandoveryian rocks of Wales. *Annals and Magazine of Natural History; including Zoology, Botany and Geology*, London, (10) 20: 617-623, pl. 14.
- 1942. On *Girvanella* in the "Shumardia Limestone" of Lévis, Quebec. *Annals and Magazine of Natural History; including Zoology, Botany and Geology*, London, (11) 9: 49-55, pl. 1.
- Morellet, L. & Morellet, J. 1939. *Tertiary siphonous algae in the W. K. Parker Collection, with descriptions of some Eocene Siphonaeae from England*. ix + 55 pp., 7 figs, 6 pls. London.
- Morris, J. 1840. Description of the plant remains. In Grant, C. W., Memoir to illustrate a Geological Map of Cutch. *Transactions of the Geological Society of London*, (2) 5: pl. 21 and plate description.
- Münster, G. 1842. Die Fucoiden des Kupferschiefers. In Meyer, H. von et al, *Beitrage Petrefacten-Kunde*. 5. 100-102, pls 14, 15. Bayreuth.
- Nicholson, H. A. & Etheridge, R. 1878. *A monograph of the Silurian fossils of the Girvan district in Ayrshire*. 1. xi + 341 pp., 24 pls. Edinburgh & London.
- Ogilvie-Gordon, M. M. 1927. Das Grödener-, Fassa- und Enneberggebiet in den Südtiroler Dolomiten. 3. Paläontologie. *Abhandlungen der Geologischen Bundesanstalt*, Wien, 24: 1-89, pls 1-13.
- Oswald, F. 1906. *A treatise on the Geology of Armenia*. vii + 516 pp., 32 pls, 12 maps. Nottingham.
- Rácz, L. 1971. Two new Pliocene species of *Neomeris* (calcareous algae) from the Bowden Beds, Jamaica. *Palaeontology*, London, 14: 623-628, pls 116-117.
- Ravin, V. & Lorch, J. 1970. *Verticilloporella*, a new Mesozoic genus of Dasycladaceae, with discussion on *Munieria* and *Actinoporella*. *Israel Journal of Botany*, Jerusalem, 19: 225-235, 3 figs, pls 1-2.
- Reid, C. R. & Groves, J. 1916. Preliminary report on the Purbeck Characeae. *Proceedings of the Royal Society of London*, London, (B) 615: 252-256, pl. 1.
- Riding, R. & Voronova, L. 1982. Recent freshwater oscillatoriacean analogue of the Lower Palaeozoic alga *Angulocellularia*. *Lethaia*, Oslo, 15: 105-114, 9 figs.
- Sahni, B. & Rao, H. S. 1943. A silicified flora from the Intertrappean Cherts round Sausar in the Deccan. *Proceedings of the National Academy of Sciences, India*, Allahabad, (B) 13: 36-75, 15 figs, pls 1-15.
- Salter, J. W. 1865. Palaeozoic In Salter, J. W. & Blanford, H. F. *Palaeontology of Niti in the Northern Himalaya*: 1-55, 5 pls. Calcutta.
- Saporta, Marquis de 1891. *Paléontologie Française. 2è série. Vegetaux, Plantes Jurassique*. 4. 548 pp., 24 pls. Paris.
- Seward, A. C. 1894. *The Wealden Flora, Part 1. Thallophyta-Pteridophyta. Catalogue of the Mesozoic plants in the Department of Geology, British Museum (Natural History)*. xl + 179 pp., 11 pls. London.
- 1898. *Fossil Plants. A Textbook for Students of Botany and Geology*. 1. xviii + 452 pp., 111 figs. Cambridge.
- 1931. *Plant Life Through the Ages*. xvii + 601 pp., 140 figs. Cambridge.
- Sowerby, J. de C. 1840. Description of organic remains. In Malcomson, J. G., On the Fossils of the Eastern portion of the Great Basaltic District of India. *Transactions of the Geological Society of London*, (2) 5: plate description and pl. 47.
- Spjeldnaes, N. 1955. *Coelosphaeridium* (Chlorophyta: Dasycladaceae) from the Caradocian Beds of north Wales. *Norsk Geologisk Tidsskrift*, Bergen, 35: 151-153, 1 fig.
- Stoneley, H. M. M. 1958. The Upper Permian Flora of England. *Bulletin of the British Museum (Natural History)*, London, (Geol.) 3: 293-337, 16 figs, pls 36-40.
- Tripp, R. P. 1979. Ordovician Auchensoul and Stinchar Limestones of the Girvan District, Strathclyde. *Palaeontology*, London, 22: 339-361, pls 37-40.
- Watson, J. 1969. A Revision of the English Wealden Flora, 1. Charales-Ginkgoales. *Bulletin of the British Museum (Natural History)*, London, (Geol.) 17: 209-254, pls 1-6.
- Whybrow, P. J., McClure, H. A. & Elliott, G. F. 1987. Miocene stratigraphy, geology and flora (Algae) of eastern Saudi Arabia and the Ad Dabtiyah vertebrate locality. In Whybrow, P. J. et al., Miocene geology and palaeontology of Ad Dabtiyah, Saudi Arabia. *Bulletin of the British Museum (Natural History)*, London, (Geol.) 41: 371-382.

- Wiman, C. 1915. Om Visingsö-Kalkstenen vid Gränna. *Geologiska Foreningens i Stockholm Forhandlingar*, Stockholm, 37: 367-375, 3 figs.
- Wood, A. 1940. Two new calcareous algae of the family Dasycladaceae from the Carboniferous Limestone. *Proceedings of the Liverpool Geological Society*, Liverpool, 18: 14-18, 1 fig., pl. 2.
- 1941. The Lower Carboniferous calcareous algae *Mitcheldeania* Wethered and *Garwoodia*, gen. nov. *Proceedings of the Geologists' Association*, London, 52: 216-226, pls 13-15.
- 1943. The algal nature of the genus *Koninckopora* Lee; its occurrence in Canada and western Europe. *Quarterly Journal of the Geological Society of London*, 98: 205-222, pls 8-10.
- 1944. Organs of reproduction in the Solenoporaceae. *Proceedings of the Geologists' Association*, London, 55: 107-113, pls 5, 6.
- 1957. The type-species of the Genus *Girvanella* (calcareous algae). *Palaeontology*, London, 1: 22-28, pls 5, 6.
- 1963. The British Carboniferous species of *Girvanella*. *Palaeontology*, London, 6: 264-273, pls 38-40.
- 1964. A new Dasycladacean alga, *Nanopora*, from the Lower Carboniferous of England and Kazakhstan. *Palaeontology*, London, 7: 181-185, pls 31, 32.
- Woodward, H. 1872. A Monograph of the British Fossil Crustacea belonging to the order Merostomata. Pt 3. (*Pterygotus* and *Slimonia*). 71-120, pls 16-20. *Palaeontographical Society* (Monographs), London.
- Wright, V. P. 1981. Ultrastructure and early diagenesis of the Viséan alga *Koninckopora*. *Palaeontology*, London, 24: 185-194, 2 figs.
- 1982. *Uraloporella* Korde from the Lower Carboniferous of South Wales. *Bulletin of the British Museum (Natural History)*, London, (Geol.) 36: 151-155, 3 figs.

# Index of Specific Names

aegagrapiloides, *Arabicodium*  
 affine, *Archaeolithothamnium*  
 aggregatum, *Lithocodium*  
 alba, *Ethelia*  
 albanense, *Lithophyllum*  
 alternans, *Neomeris*  
 ampullacea, *Permocalculus*  
 ----, *Pseudoepimastopora*  
 anadyomenea, *Cymopolia*  
 anglica, *Nanopora*  
 annulata, *Harlanjohnsonella*  
 annulata, *Salpingoporella*  
 annulatissima, *Diplopora*  
 annulus, *Dactylopora*  
 antiqua, *Acicularia*  
 ----, *Peyssonella*  
 antiquum, *Lithothrix*  
 apenninica, *Salpingoporella*  
 arabica, *Cylindroporella*  
 ----, *Griphoporella*  
 ----, *Salpingoporella*  
 archaeotypum, *Palaeothamnium*  
 archiaci, *Acicularia*  
 aschersoni, *Archaeolithothamnium*  
 assurbanipali, *Acroporella*  
 asvapatii, *Parachaetetes*  
 attenuata, *Permoperplexella*  
 aurantium, *Aphroditicodium*  
 baconica, *Munieria*  
 bahrijense, *Lithophyllum*  
 barberae, *Cymopolia*  
 barnesi, *Cylindroporella*  
 barrandei, *Acanthochonia*  
 batalleri, *Archaeolithothamnium*  
 batuense, ----  
 bellerophontis, *Gymnocodium*  
 bellovacina, *Terquemella*  
 besalotos, *Lithophyllum*  
 biserialis, *Distichoplax*  
 borealis, *Vermiporella*  
 borneoense, *Lithophyllum*  
 bowdenensis, *Neomeris*  
 bradleyi, *Clavator*  
 braunii, *Botryococcus*  
 calcicola, *Schizothrix*  
 caledonianum, *Nematophyton*  
 ----, *Prototaxites*  
 cartimanduae, *Hypocaustella*  
 clavatoris, *Algacites*  
 clypeina, *Dactylopora*  
 commune, *Mesophyllum*  
 globata, *Bevocastria*  
 convolvens, *Palaeosiphonium*  
 ----, *Pseudocodium*  
 coriniensis, *Dobunniella*  
 cosmarioides, *Stenixys*  
 cretacea, *Neomeris*  
 cuboides, *Melobesia*  
 cylindracea, *Dactylopora*  
 cylindrica, *Hensonella*  
 cyrenaicum, *Archaeolithothamnium*  
 dalmatica, *Verticilloporella*  
 darariensis, *Atractyliopsis*  
 davisii, *Larvaria*  
 deserta, *Dissocladella*  
 dichotomus, *Fucoides*  
 digitata, *Dactylopora*  
 digitatus, *Permocalculus*  
 dinarica, *Salpingoporella*  
 diplopora, *Furcoporella*  
 dobunorum, *Apophoretella*  
 donzelli, *Selliporella*  
 dubari, *Sarfatiella*  
 dubiosa, *Cretacicrusta*  
 ducii, *Girvanella*  
 durlstonense, *Charaxis*  
 edwardsi, *Cymopolia*  
 eisenacki, *Vermiporella*  
 elegans, *Microcodium*  
 elliotti, *Amphiroa*  
 elongata, *Cymopolia*  
 encrinula, *Larvaria*  
 ensomi, *Dasycladophycus*  
 eochoristosporica, *Cymopolia*  
 eruca, *Dactylopora*  
 escheri, *Chara*  
 exoticus, *Trinocladus*  
 fasciculatum, *Epiphyton*  
 fava, *Mastopora*  
 favus, *Nidulites*  
 forcepinus, *Permocalculus*  
 forfarensis, *Nematophyton*  
 ----, *Prototaxites*  
 fragilis, *Permocalculus*  
 fritschi, *Kidstoniella*  
 furcata, *Ortonella*  
 garwoodi, *Aphralysia*  
 ----, *Solenopora*  
 geometrica, *Goniola*  
 glandulosa, *Dactylopora*  
 glangeaudi, *Lithophyllum*  
 globularis, *Terquemella*  
 gotlandicum, *Sphaerocodium*  
 gracilis, *Acicularia*  
 ----, *Callisphenus*  
 ----, *Solenopora*  
 gregaria, *Mitcheldeania*  
 grovesi, *Clavator*  
 hadhramautensis, *Parachaetetes*  
 helicteres, *Chara*  
 herculea, *Teutloporella*  
 hispida, *Chara*  
 hochstetteri, *Boueina*  
 hochstetteri var. *liasica*, ----  
 hookeri, *Pachythea*  
 horrida, *Perimneste*  
 hospitalis, *Cyclocrinites*  
 ----, *Sphaerospongia*  
 incrustata, *Polygonella*  
 inflata, *Koninckopora*  
 inopinatus, *Permocalculus*  
 intermedia, *Rhabdoporella*



intermedium, Archaeolithothamnium  
iranica, Imperiella  
iranicum, Hydrolithon  
----, Pseudaethesolithon  
iraquense, Mesophyllum  
iraquensis, Amphiroa  
irenae, Permocalculus  
jonesii, Coelosporella  
jurassica, Aphralysia  
knowltoni, Chara  
----, Circonitella  
koritzae, Mesophyllum  
kurdistanensis, Cayeuxia  
----, Cymopolia  
----, Tauridium  
lafittei, Mesophyllum  
langeri, Chara  
----, Rhabdochara  
lastensis, Atractyliopsis  
lawsoni, Inopinatella  
levantinum, Pycnoporidium  
liasicum, Pycnoporidium  
lichenoides, Parachaetetes  
likana, Pseudoepimastopora  
limbata, Larvaria  
lissaviensis, Zonotrichites  
llewellyae, Leckhamptonella  
logani, Nematophycus  
----, Prototaxites  
lucasi, Clypeina  
lugeoni, Archaeolithothamnium  
lummatonensis, Palaeoporella  
----, Pseudopalaeoporella  
magnum, Lithothamnium  
maillolensis, Ovulites  
malaysiana, Epimastopora  
malcolmsoni, Chara  
maponi, Exvotarissella  
marginata, Acicularia  
marianae, Lithothamnium  
marteli, Clypeina  
medicaginula, Chara  
----, Gyrogonites  
mediterraneus, Palaeodasycladus  
melliflua, Cyclocrinites  
----, Sphaerospongia  
melobesioides, Lithoporella  
menguadi, Jania  
mercurii, Anthracoporella  
merienda, Clypeina  
mgarrense, Lithophyllum  
minima, Epimastopora  
morelleti, Ovulites  
munieri, Acicularia  
myriosporum, Archaeolithothamnium  
nana, Halimeda  
nicholsoni, Girvanella  
----, Mitcheldeania  
norvegica, Dasyporella  
nummuliticum, Archaeolithothamnium

o'gormanii, Solenomeris  
ogilvie-gordonae, Aciculella  
ordovicianae, Novantiella  
orientalis, Pseudocymopolia  
ouljanovi, Archaeolithothamnium  
parva, Mastopora  
parvovesiculifera, Thaumtoporella  
parvula, Clypeina  
peachii, Solenopora  
----, Tetradium  
penetrans, Palaeachlya  
perforatissima, Griphoporella  
permianus, Tubulites  
perplexum, Archaeolithothamnium  
perplexus, Lacryomorphus  
----, Trinocladus  
piai, Lithophyllum  
plumosus, Permocalculus  
podolica, Actinoporella  
podolicus, Trochiliscus  
polyreme, Suppiluliumaella  
prae-fructiculosum, Lithothamnium  
praemonilis, Halimeda  
prelichenoides, Lithophyllum  
problematica, Girvanella  
problematica var. spiralis, ----  
pseudoamphiroa, Lithophyllum  
pygmaea, Boueina  
pygmaea, Pianella  
----, Salpingoporella  
radoicicae, Trinocladus  
ramosissimum, Lithothamnion  
rectangulare, Dimorphosiphon  
reidi, Clavator  
reticulata, Dactylopora  
rigida, Ortonella  
saipanense, Dermatolithon  
----, Lithothamnium  
saipania, Cymopolia  
sarawakense, Lithophyllum  
satyavanti, Indoporella  
savitriae, Dissocladella  
scotica, Bythotrephes  
----, Intermurella  
scourfieldi, Langiella  
sedalanensis, Hamulusella  
segonzaciae, Sedalanella  
shebae, Lithophyllum  
silvestrii, Thyrsoporella  
sinbadi, Anchicodium  
sodalica, Pseudovermiporella  
solidus, Permocalculus  
solkani, Clypeina  
spectabilis, Anthracoporella  
sphaericum, Coelosphaeridium  
staminea, Girvanella  
stutterdi, Stichoporella  
subglobosa, Chara  
----, Sphaerochara  
sugdeni, Cylindroporella

tarafiyensis, Palaeonitella  
tenellus, Permocalculus  
tenuiramosa, Koninckopora  
tenuissima, Ortonella  
thomasi, Subterraniophyllum  
tibetica, Cymopolia  
traceyi, Lithophyllum  
tripolitanus, Trinocladus  
tuberculata, Chara  
----, Harrisichara  
undulata, Dissocladella  
variabilis, Uraloporella  
vasiformis, Chara

vaughanii, Mesophyllum  
vectensis, Chara  
----, Stephanochara  
velebitana, Mizzia  
vermiformis, Rhyniella  
vespiformis, Chara  
virgatus, Algites  
----, Chondrites  
westi, Clavator  
wetheredii, Coelosporella  
wetzeli, Pagodaporella  
wrighti, Gyrogona





